

Colchester, Fortress of the War God

strator

**Gascoyne, Adrian.; Wise,
Philip J.; Radford, David.;**

VISIT...

LANZAROTE
Caliente.COM

LANZAROTE
Caliente.COM

VISIT...

Document Outline

- [AENOR](#)

COLCHESTER

FORTRESS OF THE WAR GOD

An Archaeological Assessment



Adrian Gascoyne and David Radford

edited by
Philip J. Wise

COLCHESTER

Fortress of the War God

AN ARCHAEOLOGICAL ASSESSMENT

by

Adrian Gascoyne and David Radford

With contributions from Philip Crummy, Nina Crummy, Rosalind Niblett,
Dave Stenning, Steve Benfield, Peter Murphy and Andrew Phillips

Edited by Philip J Wise

Oxbow Books
Oxford and Oakville

in association with English Heritage

Published by
oxbow Books, oxford, UK

© oxbow Books, english heritage and the individual authors, 2013

ISBN 978-1-84217-508-8
EPUB ISBN: 978-1-78297-075-0
PRC ISBN: 978-1-78297-076-7

Cover image: A view across the late Iron Age defences at sheepen, Colchester c AD 25
(© Peter Froste. All rights reserved, DACs 2013)

This book is available direct from:

oxbow Books, oxford, UK
(Phone: 01865-241249; Fax: 01865-794449)

and

The David Brown Book Company
Po Box 511, oakville, Ct 06779, UsA
(Phone: 860-945-9329; Fax: 860-945-9468)

or from our website

www.oxbowbooks.com

A CIP record of this book is available from the British library

Library of Congress Cataloging-in-Publication Data

Gascoyne, Adrian.

An assessment of the archaeology of Colchester : fortress of the war god / by Adrian Gascoyne and David radford ; with contributions from Philip Crummy, Nina Crummy, rosaland Niblett, Dave stanning, steve Benfield, Peter Murphy and Andrew Phillips ; edited by Philip J. Wise.

pages cm

Includes bibliographical references and index.

ISBN 978-1-84217-508-8

1. Colchester (england)--Antiquities. 2. excavations (Archaeology)--england--Colchester. I. radford, David. II. Wise, Philip J., editor. III. title.
DA690.C7G37 2013
942.6'72301--dc23

2012044282

Printed and bound in Great Britain by
Berforts Information Press ltd, eynsham, oxfordshire

It is a beautiful, populous, and pleasant place, extended on the brow of an hill from west to east, and surrounded with walls, and adorned with fifteen churches... In the middle of the city, stands a castle ready to drop with age...

William Camden 1586 (*Britannia*, 4th edn, 1772, p 356)

May I venture, Sir, to take this opportunity of calling the attention of the Town Council of Colchester to the general state of the more important ancient remains which render your town so attractive to the antiquary and to the historian? Some of them, for instance, the Town Walls and the Castle, might be increased in interest by excavations judiciously conducted. A small grant of money, placed under the control of one or two of the many active and intelligent antiquarians of the locality, would but be productive of discoveries, which, while they would especially gratify the archaeologist, would doubtless be advantageous to the town at large, and increase its prosperity.

Charles Roach Smith (*Gentleman's Magazine*, January 1854, pp 70–1)

Contents

List of illustrations (figures and tables)

Foreword

Acknowledgements

Abbreviations

Summary

Résumé

Zusammenfassung

INTRODUCTION

1 THE HISTORY OF ARCHAEOLOGY IN COLCHESTER

The antiquarians and collectors

The excavators

The Colchester Archaeological Trust

2 GEOLOGY AND THE DEPOSIT MODEL

Solid Geology

Drift Geology

The Colchester Deposit Model

Introduction

Character of archaeological deposits in Colchester

Sequence and nature of the deposits

Preservation of finds

Archaeological deposits

Results of the modelling

3 PREHISTORIC COLCHESTER

Introduction

Past work

The finds evidence

The archaeological evidence

Palaeolithic, Mesolithic and Neolithic

The Bronze Age

The early and middle Iron Age

The current state of knowledge

Preservation

Importance

Potential for future research

4 CAMULODUNON IN THE LATE IRON AGE, c 50 BC–AD 43

Introduction and historical framework

Past work

The finds evidence

The archaeological evidence

The oppidum

The dykes

Settlement – Sheepen

- Other settlement evidence
- Manufacturing and trade
- Agriculture and the field system
- Burials and ritual structures
- The current state of knowledge
- Preservation
- Importance
- Potential for future research

5 THE ROMAN LEGIONARY FORTRESS, AD 43–49

- Introduction and historical framework
- Past work
- The finds evidence
- The archaeological evidence
 - Military structures outside the legionary fortress
 - Siting, preparation, laying-out and construction of the fortress
 - Industrial activity
 - Food, water supply and drainage
 - Disposal of the dead
 - Claudian occupation evidence and Iron Age continuity
- The current state of knowledge
- Preservation
- Importance
- Potential for future research

6 THE EARLY ROMAN COLONIA, AD 49–61

- Introduction and historical framework
- Past work
- The finds evidence
- The archaeological evidence
 - The creation of the *colonia* and its hinterland
 - Fortress into *colonia*: the revised layout
 - Defences
 - Buildings of the *colonia*
 - Manufacturing and trade
 - Diet
 - Cemeteries
 - Resistance to Rome – evidence for the Boudican revolt
- The current state of knowledge
- Preservation
- Importance
- Potential for future research

7 THE LATER ROMAN TOWN, AD 61–410

- Introduction and historical framework
- Past work
- The archaeological evidence
 - Topographical organisation
 - Boundaries, defences and roads
 - Public and monumental buildings and structures

- Water supply
 - Domestic and commercial buildings
 - Manufacturing and trade
 - Farming strategies and diet
 - Religious and burial practice
 - Extramural development
 - The current state of knowledge
 - Preservation
 - Importance
 - Potential for future research
- 8 EARLY ANGLO-SAXON COLCHESTER, 410–916
- Introduction and historical framework
 - Past work
 - The finds evidence
 - The archaeological evidence
 - Occupation
 - Coins
 - Burials
 - Possessions
 - Pottery
 - The current state of knowledge
 - Preservation
 - Importance
 - Potential for future research
- 9 LATE ANGLO-SAXON COLCHESTER, 917–1066
- Introduction and historical framework
 - Past work
 - The nature of the evidence
 - The finds evidence
 - The archaeological evidence
 - Town defences, street system and urban plan
 - Religious buildings
 - Secular buildings
 - Pottery and metalwork
 - Manufacturing and trade
 - The late Anglo-Saxon countryside
 - The current state of knowledge
 - Preservation
 - Importance
 - Potential for future research
- 10 EARLY MEDIEVAL COLCHESTER, 1066–1348
- Introduction and historical framework
 - Past work
 - The nature of the evidence
 - The finds evidence
 - The archaeological evidence
 - The castle

- Town defences
- Streets
- Monasteries and churches
- Public buildings and works
- Domestic architecture
- Open space
- Suburbs
- The re-use of Roman materials
- The Hythe, commerce, trade and manufacturing
- The countryside
- The current state of knowledge
 - Preservation
 - Importance
 - Potential for future research
- Colchester medieval deposits: biological remains

11 LATE MEDIEVAL COLCHESTER, 1349–1540

- Introduction and historical framework
- Past work
- The nature of the evidence
- The finds evidence
- The archaeological evidence
 - The urban plan
 - Public buildings and works
 - The town wall, town gates and castle
 - Manufacturing and trade
 - Domestic and commercial architecture
 - Cellars and undercrofts
 - The religious foundations and charitable institutions
 - Churches
 - The countryside
- The current state of knowledge
 - Preservation
 - Importance
 - Potential for future research

12 POST-MEDIEVAL COLCHESTER, 1540–1700

- Introduction and historical framework
- Past work
- The nature of the evidence
- Summary of finds assemblages
- The archaeological evidence
 - The urban plan
 - The impact of the Dissolution
 - Public buildings and other works
 - The Hythe
 - The town wall, town gates and castle
 - Domestic and commercial architecture
 - Standing buildings

- Excavated buildings
- Brick and tile
- Manufacturing and trade
- The cloth industry
- The Civil War
- Agriculture

- The current state of knowledge

- Preservation

- Importance

- Potential for future research

13 POST-1700 COLCHESTER

- Introduction and historical framework

- Assessment of importance and potential

APPENDICES

- Gazetteer of prehistoric monuments, elements and finds from the study area

- Gazetteer of late Iron Age monuments, elements and finds from the study area

- Gazetteer of Roman monuments, elements and finds from the study area

- Gazetteer of early Saxon monuments, elements and finds from the study area

- Gazetteer of late Saxon monuments, elements and finds from the study area

- Gazetteer of medieval monuments, elements and finds from the study area

- Gazetteer of the significant late medieval buildings of Colchester

- Gazetteer of late medieval monuments, elements and finds from the study area

- Gazetteer of post-medieval monuments, elements and finds from the study area

- Gazetteer of excavations in Colchester 1845–2008

- Tables

BIBLIOGRAPHY

INDEX

List of Illustrations

List of Figures

Introduction

0.1 Map of Eastern England showing the location of Colchester and places mentioned in the text.

1 The history of archaeology in Colchester

Fig 1.1 The Built-up Area of Colchester Showing Modern Streets (insert to Fig 3.2).

Fig 1.2 The Colchester Sphinx, only part of a very large and elaborate Roman tomb, and one of the first archaeological discoveries in the town to be the subject of scholarly research (from Hay 1821).

Fig 1.3 Displays in the Castle Museum in 1909 (Colchester Museums).

Fig 1.4 Plan of Colchester showing the find spots of Roman antiquities known in the late 19th century (from Cutts 1889).

Fig 1.5 Rex Hull was a leading figure in British archaeology in the mid-20th century and established an early sites and monument record for Essex (Colchester Museums).

Fig 1.6 'The Head Street' excavation in 2000, on the site of the former Post Office, was one of the Colchester Archaeological Trust's largest projects in recent years (Philip J Wise).

2 The UAD and Deposit Model

Fig 2.1 Total depth of deposits to natural.

Fig 2.2 Schematic section through the archaeological deposits at the west end of the walled town.

3 Prehistoric Colchester

Fig 3.1 Prehistoric and Iron Age Colchester: distributions of find spots and significant elements shown in relation to the later Roman town wall.

Fig 3.2 The Colchester Area showing the principal features from the Prehistoric to Roman periods, including cropmarks (in light grey), Roman Roads (in grey) and dykes (in black).

Fig 3.3 The ritual pit deposit excavated at Culver Square is the earliest settlement evidence from what is now Colchester town centre (Colchester Archaeological Trust).

Fig 3.4 The Sheepen Cauldron (The Society of Antiquaries).

Fig 3.5 Reconstruction painting of a middle Iron Age enclosure at Ypres Road, Colchester (© Peter Froste. All rights reserved, DACS 2013).

Fig 3.6 Plan of the Middle Iron Age enclosure at Ypres Road, Colchester (Colchester Archaeological Trust).

4 Camulodunon in the late Iron Age, c 50–AD

Fig 4.1 A gold quarter-stater of Tasciovanus with the mint mark CAML. This coin was struck around 25 BC and is the oldest surviving representation of the ancient name of Colchester (COLEM: 2006.4).

Fig 4.2 Fragments of 'coin moulds' as found during excavations at Kiln Road, Sheepen in

1971, which were used to make blanks rather than the coins themselves (Colchester Archaeological Trust).

Fig 4.3 Distribution of the coins of Tasciovanus and Cunobelin (Cunliffe 2010, source CCI 2003).

Fig 4.4 A view of Gryme's Dyke, showing the usual arrangement of an outer ditch and an inner bank. Although Gryme's Dyke is 1st century, definitely post-Conquest and probably post-Boudican, it is of the same design as earlier Iron Age examples (Colchester Museums).

Fig 4.5 A reconstruction painting of a late Iron Age ship based on a design found on a coin of Cunobelin (Frank Gardiner).

Fig 4.6 The Lexden Tumulus was arguably subject to one of the first scientific excavations in Colchester and certainly demonstrated the significance of the area for the study of late Iron Age Britain (Philip J Wise).

Fig 4.7 The burial site at Stanway, to the west of Colchester, is of international importance for the study of the funerary rituals of the late Iron Age elite (insert to Fig 3.2) (Colchester Archaeological Trust).

Fig 4.8 Cropmark features in the Gosbecks area (insert to Fig 3.2) (Colchester Archaeological Trust).

Fig 4.9 Sheepen, showing a selection of features from the various excavations (insert to Fig 3.2).

5 The Roman legionary fortress, AD 43–49

Fig 5.1 The legionary fortress and annexe; distribution of find spots, monuments and significant elements shown in relation to the later Roman town wall.

Fig 5.2 An aerial photograph of the Roman fort at Gosbecks taken in 1979 (Ida McMaster).

Fig 5.3 Construction methods for Roman walls, from Lion Walk, Culver Street and Balcerne Lane (Colchester Archaeological Trust).

6 The early Roman *colonia*, AD 49–61

Fig 6.1 The early *colonia* and its eastward extension showing distribution of find spots, monuments and significant elements.

Fig 6.2 The 'vaults' or foundations of the Temple of Claudius as these appear today; the sand, which originally filled the void was dug out in the late 17th century (Colchester Museums).

Fig 6.3 The tombstone of Marcus Favonius Facilis provides remarkable evidence for the weapons, armour and clothing of a centurion of the mid-1st century AD (Colchester Museums).

Fig 6.4 The tombstone of Longinus shows a mounted Roman cavalryman riding triumphantly over a cowering barbarian (Colchester Museums).

Fig 6.5 The 'Child's Grave' is an outstanding burial from Roman Britain and demonstrates the pre-eminence of Colchester in the early years of the *colonia* (Colchester Museums).

7 The later Roman town, AD 61–410

Fig 7.1 Plan of the Roman town, with *insulae* numbered, in relation to the modern town.

Fig 7.2 The later Roman town showing street grid and distribution of monuments and significant elements.

Fig 7.3 The Roman town wall to the south of the Balcerne Gate displays characteristic

alternating courses of tile and septaria (Tony Nichols).

Fig 7.4 The surviving pedestrian archway of the Balcerne Gate is only a small part of what was a massive entranceway into Roman Colchester from the west (Tony Nichols).

Fig 7.5 A view of Duncan's Gate taken in 1929, following its conservation, which clearly shows the separate block of fallen masonry representing part of the tower (Colchester Museums).

Fig 7.6 Elevation showing the interior face of the Roman town wall and the Roman culvert at Short Wyre Street (Colchester Archaeological Trust).

Fig 7.7 The Roman drain at St Peters Street under excavation (Colchester Archaeological Trust).

Fig 7.8 The Roman theatre in Maidenburgh Street as it might have appeared in *c* AD 275 (© Peter Froste. All rights reserved, DACS 2013).

Fig 7.9 Excavations have now revealed evidence for the whole of the plan of the circus, including the central barrier, the running track, the stands and the starting gates (Colchester Archaeological Trust).

Fig 7.10 Culver Street AD *c* 44–49 (insert to Fig 7.2) (Colchester Archaeological Trust).

Fig 7.11 Culver Street AD 60/61 – *c* 150/200 (insert to Fig 7.2) (Colchester Archaeological Trust).

Fig 7.12 Culver Street AD *c* 150/200 – *c* 275–325 (insert to Fig 7.2) (Colchester Archaeological Trust).

Fig 7.13 Lion Walk AD *c* 49–61 (insert to Fig 7.2) (Colchester Archaeological Trust).

Fig 7.14 Lion Walk AD *c* 100–450 (insert to Fig 7.2) (Colchester Archaeological Trust).

Fig 7.15 Bathhouse and town houses at The Sixth Form College (Colchester Archaeological Trust).

Fig 7.16 Bathhouse at the Sixth Form College under excavation (Colchester Archaeological Trust).

Fig 7.17 Part of a cylindrical glass cup decorated with an image of a charioteer with four horses reigned to a halt. It was found at Balcerne Lane, Colchester in 1976 and dates to the period AD 60–80 (COLEM: 1986.67.9999).

Fig 7.18 The Middleborough Mosaic (Colchester Archaeological Trust).

Fig 7.19 Ground plan of Temple of Claudius (P Crummy 1980).

Fig 7.20 Gosbecks in the Roman period (Colchester Archaeological Trust).

Fig 7.21 Reconstruction drawing of the 'temple-tomb' found at the Royal Grammar School in 2005 (© Peter Froste. All rights reserved, DACS 2013).

Fig 7.22 Location map of Roman cemeteries.

Fig 7.23 Plan of Roman burials excavated at Abbey Field, Napier Road and Garrison Areas J1 North and C2 (insert to Fig 7.22) (Colchester Archaeological Trust).

Fig 7.24 Plan of Roman burials excavated at Handford House (insert to Fig 7.22) (Colchester Archaeological Trust).

Fig 7.25 Plan of Roman burials excavated at Butt Road (insert to Fig 7.22) (Colchester Archaeological Trust).

Fig 7.26 The site at Butt Road is one of only a handful of Roman churches recognised in Britain (Philip J Wise).

Fig 7.27 Plan of Butt Road Roman Church (Colchester Archaeological Trust).

Fig 7.28 Extramural development at Balcerne Lane and St Mary's Hospital Site (insert to Fig 7.2) (Colchester Archaeological Trust).

8 Early Anglo-Saxon Colchester, 410–916

Fig 8.1 The early Anglo-Saxon town showing distribution of find spots, monuments and significant elements.

Fig 8.2 Hut 1, a sunken-featured building from Lion Walk, is one of very few pieces of evidence for an Early Anglo-Saxon presence in Colchester (Colchester Archaeological Trust).

Fig 8.3 A group of Anglo-Saxon objects from the Guildford Road Estate, Colchester found in the early 1970s: 1 bronze brooch spring; 2–3 bronze rings; 4–5 bronze brooches; 6–11 beads; 12 silver finger-rings (from *CAR* 1, fig. 13).

9 Late Anglo-Saxon Colchester, 917–1066

Fig 9.1 The late Anglo-Saxon town showing distribution of find spots, monuments and significant elements.

Fig 9.2 The tower of Holy Trinity church is the only surviving architectural evidence of late Saxon Colchester (Tony Nichols).

Fig 9.3 The triangular-headed west doorway of Holy Trinity church tower is of characteristic Anglo-Saxon design (Tony Nichols).

Fig 9.4 A silver penny of Æthelred II struck by the moneyer Swetinc during the period AD 991–7. This is one of the earliest coins minted in Colchester (COLEM: 1929.517).

10 Early medieval Colchester, 1066–1348

Fig 10.1 The early medieval town showing distribution of monuments and significant elements.

Fig 10.2 The south front of Colchester Castle said to be the largest Norman keep in existence (Tony Nichols).

Fig 10.3 Although the present Scheragate only dates to the 17th century, it retains the feel of a medieval gateway, the only point on the circuit of the town wall where this is possible (Tony Nichols).

Fig 10.4 St John's Abbey church from the south; a late 15th-century view, as shown in Morant's 'History of Colchester' of 1748, appears to show a Norman building with later Gothic additions.

Fig 10.5 The west front of St Botolph's Priory contains the traces of the earliest major round window in England, c 1150 (Tony Nichols).

Fig 10.6 Detail of the architecture of the west front of St Botolph's Priory (Tony Nichols)

Fig 10.7 A plan showing the medieval stone houses recorded in the town centre (from *CAR* 1, fig. 53).

Fig 10.8 The Norman house at Foundry Yard photographed during its demolition in 1886, showing the exterior western wall and the interior of the building beyond (Colchester Museums).

Fig 10.9 The cellar beneath 35–37 High Street showing a rubble wall with surviving 14th-century features (Philip J Wise).

11 Late medieval Colchester, 1349–1540

Fig 11.1 The late medieval town showing distribution of monuments and significant elements.

Fig 11.2 The Angel Court excavation site as it was in the late medieval and post-medieval periods (from ESAH 27, fig 9).

Fig 11.3 Bastion 2 in Priory Street is one of a series of external towers added to the town wall to strengthen its south-eastern corner (Philip J Wise).

- Fig 11.4 The Red Lion Hotel dates to 1515. It is probably the most significant surviving timber-framed building in Colchester (Colchester Museums).
- Fig 11.5 The *Marquis of Granby* on North Hill, built in the 1520s, has a surviving rear door with carved spandrels (Colchester Museums).
- Fig 11.6 The east wing of the *Marquis of Granby* has a main ceiling beam resting on brackets with very well-carved male figures dating to c 1525 (Colchester Museums).
- Fig 11.7 St John's Abbey gatehouse was built as a tangible expression of the power and prestige of the abbey during the 15th century (Tony Nichols).

12 Post-medieval Colchester, 1540–1700

- Fig 12.1 The post-medieval town showing distribution of monuments and significant elements.
- Fig 12.2 The timber-framed building at All Saints Court in Culver Street was recorded by the Royal Commission in 1922, but sadly demolished in 1939 (Colchester Museums).
- Fig 12.3 Speed's map of 1610 is the earliest accurate depiction of Colchester showing many details which may still be verified today such as the location of the town's churches (Essex Record Office).
- Fig 12.4 The 1648 Siege Map shows the Parliamentary batteries and siegeworks encircling the town (Essex Record Office).

13 Post-1700 Colchester

- Fig 13.1 A view of Colchester High Street in 1858, including three buildings now demolished: the Cups Hotel in 1972, the first Victorian Town Hall in 1899 and St Runwald's Church in 1878 (Colchester Museums)
- Fig 13.2 The officers' quarters at the Le Cateau Barracks built in the period 1873–5 for the Royal Artillery and part of a very rare surviving group of military buildings (Colchester Museums).
- Fig 13.3 Workmen leaving Paxman's engineering works at the Hythe in 1910 (Colchester Museums).

List of Tables

Table 1	Lesser streets in the Legionary Fortress
Table 2	Legionary barracks in the Fortress
Table 3	Major excavations in the early <i>Colonia</i>
Table 4	Earliest documentary references to medieval streets
Table 5	Analysis of medieval and early modern houses and 'buildings' on the statutory lists for Colchester and Saffron Walden by century
Table 6	Significant surviving late medieval buildings in Colchester
Table 7	Excavated post-medieval buildings in Colchester

Foreword

Three simple letters - 'CAM' - appear on certain coins minted in Britain shortly before the birth of Christ. These letters confer on Colchester the signal distinction of being the oldest recorded town in the British Isles, because 'CAM' is an abbreviation of 'Camulodunon', the Celtic name (later rendered in Latin as 'Camulodunum') for the place we now know as Colchester. These coins were almost certainly minted here, because Camulodunum was a capital for British tribal kings before the Roman conquest of Britain in 43 AD. It was then the place where the victorious Roman emperor Claudius accepted the submission to Roman rule of a number of British tribes. Camulodunum subsequently became a Roman *colonia* (a settlement for retired legionary soldiers) and was one of the most important cities in the Roman province of *Britannia*. In Saxon and medieval times it became a significant regional centre, a role that Colchester retains to this day.

Given this long and illustrious history, it is no surprise that Colchester has a rich archaeological and historical heritage. Archaeologists and antiquarians have been collecting information about Colchester's past since the 16th century. The town has many monuments and historic buildings, while much more has lain hidden until uncovered by archaeological excavations. The history of archaeological research in Colchester, as in many other places, has been closely bound up with discoveries made during development and expansion of the town. Important excavations were carried out in the 1930s, and then again from the 1950s onwards. The pace of activity has quickened in recent decades, with some 157 archaeological interventions having taken place in the Borough since 1990. Planning permission for new development is now routinely linked to a requirement for archaeological work before building starts, so there is a steady stream of important new information coming to light.

This is the background to the present volume. It is a product of a long-term English Heritage programme, launched in 1992 under the title *Managing the Urban Archaeological Resource*. One part of that programme has been to carry out detailed studies of the archaeology of 35 selected major historic towns and cities in England. Colchester was, naturally enough, one of the places chosen. From the start, the project was envisaged as having three stages. The first was to compile a detailed Urban Archaeological Database (or UAD), linked to computerised mapping, of archaeological excavations and discoveries in Colchester. The UAD is held by Colchester Borough Council. The second stage was to produce a synthesis (an 'Urban Archaeological Assessment') of this mass of material. The present volume is the result of that work. The third and final stage was to produce a strategy for the future care and appreciation of Colchester's archaeological and historic heritage. Some work has been done on this, but frequent changes in the planning system in recent years have impeded the completion and adoption of such a strategy. This remains an important task for the Borough.

This volume therefore represents the culmination of a long-term process. The Colchester UAD was compiled between 1998 and 2000, with subsequent updates in the following years. The first draft of this volume was completed in 2002 but staff changes and other pressures meant that it was not possible to submit the manuscript until 2011. The long gestation of the volume is a testament to the difficulties of undertaking synthesis of archaeological results on this scale. There have been many hundreds of archaeological excavations, observations and discoveries in Colchester since the 18th century, and drawing these together into an accessible narrative has been a major task. The value of having

achieved this synthesis lies in the fact that there is now, in this volume, a comprehensive and authoritative summary of the archaeology of Colchester, fully supported by a detailed bibliography, gazetteer and cross-references to the Colchester UAD for anyone who wishes to follow up the original sources.

The appearance of this volume is in itself a considerable tribute to the efforts of its authors. Warm thanks are to be extended to the main authors, David Radford and Adrian Gascoyne, who did much of the basic work of distilling the contents of the Colchester UAD – which they themselves had compiled – into an integrated narrative-based account. Very considerable thanks are also due to the other contributors to the volume (Philip Crummy, Nina Crummy, Rosalind Niblett, Dave Stenning, Steve Benfield, Peter Murphy and Andrew Phillips) for their hard and diligent work, which has brought much detailed and specialist knowledge and insight to the text. The greatest debt of gratitude, however, is owed to Philip Wise, who co-ordinated the work on the volume throughout, and who has made a major contribution by bringing together and editing the contributions of each of the authors. Without Philip's great determination and many hours of hard work, fitted in around other duties in Colchester Museum, it is quite possible that the volume would never have seen the light of day. On behalf of English Heritage, at whose suggestion the project was carried out, I would like to thank all of these people.

One of the defining characteristics of archaeology as a subject is that it does not stand still. New discoveries are constantly being made, and fresh interpretations and ideas are always being developed. The finding in 2007, on a development site, of the internationally important Colchester Roman circus demonstrates, in a particularly graphic way, how even a place as thoroughly explored as Colchester still has the capacity to yield surprises. The flow of discoveries will continue and, at some point in the future, a fresh synthesis of Colchester's archaeology will undoubtedly be needed. That day, however, seems likely to lie far in the future. The present volume will stand as a major milestone in the study of Colchester's past for many years to come. Furthermore, the publication of this volume will, in itself, almost certainly prompt renewed debate about Colchester's past, and the framing of new questions on which archaeological work may be able to shed light. I hope, therefore, that this volume, as well as marking the conclusion of a major endeavour, will also signal a beginning: the start of a further chapter in the investigation of this town's rich and internationally important archaeological and historic heritage.

Roger M Thomas
English Heritage
August 2012

Acknowledgements

The Colchester Urban Archaeological Database was created by David Radford and Adrian Gascoyne under the direction of a steering group comprising Roger Thomas, Deborah Priddy, Ian Vipond, Paul Gilman, Peter Berridge and Philip J Wise.

The principal authors would like to thank their co-authors, Philip Crummy, Nina Crummy, Rosalind Niblett, Dave Stenning, Steve Benfield, Peter Murphy and Andrew Phillips, for their contributions to this assessment volume. Its preparation has been greatly assisted by Steve Benfield, Howard Brooks, Chris Lister, Maureen McDonald and the staff of the Colchester Archaeological Trust. In addition, assistance and advice has been received from Mark Davies, Richard Shackle, Paul Coverley, Rod Ross, Simon Colcutt and Alison Bennett. Lastly, we would like to thank Pat Brown, John Mallinson and other members of the Colchester Archaeological Group for their roles in undertaking the Colchester Cellar Survey.

The authors and editor would also like to thank the following for acting as referees for individual chapters: Bob Markham, Nigel Brown, Rosalind Niblett, Paul Sealey, Steve Roskams, Catherine Hills, Andrew Reynolds, Brian Ayres, Nigel Baker, John Schofield and Mike Fulford. In addition, Stanley Ireland has commented on the sub-sections dealing with Roman history and Peter Berridge on those relating to Colchester Castle. The Gazetteers were checked by Alex Richards and the remainder of the text by Sarah Harrison. Additional editorial assistance was provided by Kate Orr to whom the editor is most grateful. The photographs were taken by Tony Nichols and Philip J Wise.

Abbreviations

<i>AS Chron</i>	<i>Anglo-Saxon Chronicle</i>
Bodl	Bodleian Library, Oxford
BL	British Library
<i>Cal Inq Misc</i>	<i>Calendar of Inquisitions Miscellaneous (Chancery) preserved in the Public Record Office (HMSO 1965–68)</i>
<i>Cam.</i>	Camulodunum pottery fabric series described in Hawkes and Hull 1947, 202–81
CAT	Colchester Archaeological Trust (where followed in the text by a series of numbers and letters this represents an archive report)
CATB	Colchester Archaeological Trust Buildings Series
<i>Close R</i>	<i>Close Rolls of the Reign of Henry III preserved in the Public Record Office (HMSO 1902–75)</i>
CM	Colchester Museums
CMR	Borough of Colchester [Annual] Report of the Museum and Muniment Committee
<i>Colchester Archaeol</i>	<i>The Colchester Archaeologist</i> (Colchester Archaeological Trust Annual Magazine)
COLEM	Colchester Museums Accession Register
CPL	Colchester Public Library
CR	<i>Colchester Court Roll</i>
CUCAP	Cambridge University Collection of Air Photos
<i>DNB</i>	<i>Dictionary of National Biography</i>
EHCR	Essex Heritage Conservation Record
ELM	element
ERO	Essex Record Office
FND	find
GG	Grave Group; M R Hull's unpublished <i>Index of Grave Groups</i> , Colchester Museums
GRP	group
MON	monument
OS	Ordnance Survey
POW	prisoner of war
RCHME	Royal Commission on the Historical Monuments of England
<i>RIB1</i>	R G Collingwood and R P Wright (eds) 1965 <i>Roman Inscriptions of Britain</i> , vol 1. Oxford: Clarendon Press
<i>RIB 2</i>	S S Frere and R S O Tomlin (eds) 1991 <i>Roman Inscriptions of Britain</i> , vol 2, Fascicule 3

Rot Parl
SAU
Trans Essex Archaeol Soc

UAD

S S Frere and R S O Tomlin (eds) 1994
Roman Inscriptions of Britain, vol 2, Fascicule
6
Rotuli Parliamentorum (1783, 1832). London
Suffolk Archaeological Unit
Transactions of the Essex Archaeological Society,
the former (pre-1972) title for *Essex Archaeol*
Hist
Urban Archaeological Database

Summary

This volume is a critical assessment of the current state of archaeological knowledge of the settlement originally called Camulodunon and now known as Colchester. The town has been the subject of antiquarian interest since the late 16th century and the first modern archaeological excavations occurred in 1845 close to Colchester Castle, the town's most prominent historic site.

The earliest significant human occupation recorded from Colchester dates to the late Neolithic, but it was only towards the end of the 1st century BC that an oppidum was established in the area. This was superseded initially by a Roman legionary fortress and then the colonia of Camulodunum on a hilltop bounded on the north and east by the river Colne. There is little evidence for continuing occupation here in the early post-Roman period, but in 917 the town was re-established as a burgh and gradually grew in importance.

After the Norman Conquest, a castle was built on the foundations of the ruined Roman Temple of Claudius, and a priory and an abbey were established just to the south of the walled town. Although the town, as elsewhere, was affected by the Dissolution of the Monasteries and the English Civil War it remained essentially medieval in character until the 18th century. During the 19th century this process of change was accelerated by the arrival of the railway, industrialisation and the establishment of the military garrison.

Since the 1960s Colchester has been subject to recurring phases of re-development, the most recent having ended only in 2007, which have had a significant impact on the historic environment. Fortunately the activities of the Colchester Archaeological Trust have resulted in the town being one of the best studied in the country and thus enabled this present volume to be written.

The UAD Study Area

The Colchester Urban Archaeological Database (UAD) covers an area of 20 square km. The boundaries of the study area follow OS grid squares in a rectangle defined by the NGR points TL970230, TL970270, TM020230 and TM020270. The UAD encompasses the Iron Age and Roman settlement at Sheepen, the Iron Age burials at Lexden, the Roman walled town, the Roman suburbs and cemeteries, the medieval suburbs and ecclesiastical precincts, the port at New Hythe and the bulk of the Civil War siege circuit. Monuments only partly falling into the UAD area are excluded, with the exception of the Gosbecks complex and Iron Age and Roman dykes. The cut-off date for the UAD is 1700.

Note on site names

Over time the place-names of certain locations in Colchester have changed. Most notable examples are the nineteenth-century Union Workhouse, which during the latter part of the twentieth century was known as St Mary's Hospital and, following its closure in 1993 and subsequent demolition, is now known as Balcerne Heights; and the building which from 1959 to 1987 was known as the Gilbert School and today is the Sixth Form College.

Note on report preparation

The first draft of the Colchester Urban Archaeological Assessment was completed by David

Radford and Adrian Gascoyne in 2002. Work on revising the manuscript following the comments of external referees occurred in the following years and the text of the main chapters was revised by Philip J Wise in 2008 to take account of recent discoveries. The contributions by Philip and Nina Crummy were originally written in 2002 and, likewise, where possible, were revised to bring them up to date. In 2010–11, following comments by an external reader, the prehistoric, Iron Age and Roman chapters were further revised.

Résumé

Ce volume est une évaluation critique de l'état actuel de nos connaissances de l'archéologie d'un campement qui s'appelait à l'origine Camulodunon et est maintenant connu sous le nom de Colchester. La ville a fait l'objet de l'intérêt des passionnés d'antiquité depuis la fin du XVI^e siècle et les premières fouilles archéologiques modernes ont eu lieu en 1845 près du château de Colchester, le site historique le plus proéminent de la ville.

La plus ancienne occupation humaine de quelque importance répertoriée à Colchester date de la fin du néolithique, mais ce ne fut que vers la fin du I^{er} siècle av. J.-C. qu'un oppidum fut établi dans cette zone. Celui-ci fut remplacé initialement par une forteresse légionnaire romaine puis par la colonia de *Camulodunum* sur un sommet de colline bordée au nord et à l'est par la rivière Colne. Il y a peu de témoignages d'occupation continue à cet endroit au début de la période post-romaine, mais, en 917, la ville fut réétablie en tant que bourg et son importance s'accrut graduellement.

Après la conquête normande, un château fut construit sur les fondations du temple romain de Claudius, alors en ruines, et un prieuré et une abbaye furent fondés juste au sud de la ville fortifiée. Bien que, comme ailleurs, la ville fut affectée par la dissolution des monastères et la guerre civile anglaise, elle a essentiellement gardé son caractère médiéval jusqu'au XVIII^e siècle. Au cours du XIX^e siècle ce processus de changement s'accéléra à cause de l'arrivée du chemin de fer, de l'industrialisation et de l'implantation d'une garnison militaire.

Depuis les années 1960, Colchester a été l'objet de récurrentes phases de remise en valeur, la plus récente n'ayant pris fin qu'en 2007, qui ont eu un impact significatif sur l'environnement historique. Heureusement, les interventions du Trust Archéologique de Colchester ont eu comme résultat que la ville est l'une des mieux étudiées du pays et ont ainsi permis la rédaction du présent volume.

Zusammenfassung

Dieser Band ist eine kritische Bestandsaufnahme des aktuellen archäologischen Kenntnisstands über die ursprünglich Camulodunon genannte Siedlung, die jetzt als Colchester bekannt ist. Die Stadt war schon seit dem späten 16. Jahrhundert Gegenstand antiquarischen Interesses, und die ersten modernen archäologischen Ausgrabungen wurden 1845 in der Nähe von Colchester Castle durchgeführt, der bedeutendsten historischen Stätte der Stadt.

Die früheste gesicherte menschliche Siedlungsaktivität in Colchester stammt aus der späten Neusteinzeit, aber die Gründung eines Oppidums in diesem Bereich fand erst gegen Ende des 1. Jahrhunderts v. Chr. statt. Diesem folgte zunächst ein römisches Legionslager und später die auf einem im Norden und Osten vom Fluss Colne begrenzten Hügel gelegene colonia *Camulodunum*. Es fanden sich bislang nur geringe Hinweise für eine Fortdauer der Besiedlung in der frühen nach-römischen Periode, aber seit der im Jahre 917 erfolgten Neugründung der Stadt als eine burgh nahm ihre Bedeutung stetig zu.

Nach der normannischen Eroberung wurde auf den Fundamenten des römischen Claudius-Tempels eine Burg errichtet, und unmittelbar südlich der Stadtmauer wurden ein Priorat und eine Abtei gegründet. Obwohl die Stadt, wie andere Orte auch, von den Auswirkungen der Auflösung der Klöster und dem Englischen Bürgerkrieg nicht verschont blieb, behielt sie ihren mittelalterlichen Charakter doch bis zum 18. Jahrhundert. Während des 19. Jahrhunderts beschleunigte sich dieser Veränderungsprozess mit der Ankunft der Eisenbahn, der Industrialisierung und der Gründung der militärischen Garnison.

Seit den 1960iger Jahren sah sich Colchester wiederholte Male Sanierungsphasen ausgesetzt; die jüngste Phase, die bedeutende Auswirkungen auf das historische Umfeld hatte, wurde erst 2007 abgeschlossen. Die Abfassung dieses Bandes wurde ermöglicht, da Colchester durch die Arbeit des Colchester Archaeological Trust glücklicherweise eine der am besten erforschten Städte des Landes ist.

Übersetzung: Jörn Schuster

Introduction

Colchester lies in the south-east of England, in the county of Essex, 82km (50 miles) north-east of London. Its estuarine location has been significant throughout its history. The town sits on a low plateau of glacial outwash sands and gravels delimited by the river Colne to the north, and the Roman River to the south.

The earliest settlement on this site was the massive Iron Age territorial *oppidum* of Camulodunon. The *oppidum* was defended by an extensive dyke system enclosing some 28 square km. The significance of this settlement was such that it was the main strategic objective of the Roman invasion force in AD 43, with the Emperor Claudius himself entering the *oppidum* as commander-in-chief of the victorious army.

The main areas of Iron Age settlement were situated to the west and south-west of the town, at Sheepen and Gosbecks. At Sheepen, extensive excavations between 1930 and 1939 produced evidence for a major trading and manufacturing settlement dating back to around AD 5. To the south-west, at Gosbecks, excavations and aerial photography have revealed an extensive native farm based around a large trapezoidal farmstead enclosure and associated ritual enclosure. Coin evidence suggests the existence of a defended settlement here by 25 BC. Elsewhere, important Iron Age prestige burial areas have been located at Lexden and Stanway.

In AD 49 the legionary fortress was converted into a *colonia* and effectively became the first capital of Roman Britain. Its high status was assured by the construction of the impressive Temple of Claudius in the city, which was built to worship the deified emperor after his death in AD 54. The temple and city were burnt to the ground during the Boudican revolt of AD 60/1, but were rebuilt shortly afterwards. The difficulty of bringing larger Roman ships up the relatively shallow river Colne, as well as the city's geographical isolation, quickly led to London overtaking Colchester in terms of political importance. Nevertheless, Colchester remained an important provincial centre until the collapse of Roman rule in the 5th century, although the settlement may have declined significantly from the end of the third century, as the suburbs appear to contract after this time. Today the richness of Colchester's Roman legacy can be seen in the exceptional period collections held at Colchester Castle Museum and in the upstanding Roman structures – including the town wall, the Balcerne Gate, the Roman drains and the podium of the Temple of Claudius.

Roman Colchester appears to have finally succumbed to Saxon settlers by AD 450. Three 'sunken-featured buildings' have been identified within the walls, the earliest dating to c AD 400–50 and the latest to the 7th century. The pattern of early Saxon settlement is dispersed and low-level; pottery, coins, loomweights and brooches of the 5th–8th centuries have been found spread across the walled area. Outside the walls a number of Saxon graves have been located at Mersea Road, the Guildford Road Estate and the Union, apparently continuing the use of Roman burial areas. During the 8th and 9th centuries Colchester appears to have been little more than a village, the inhabitants of which were engaged in subsistence farming.

The *Anglo-Saxon Chronicle* records that in AD 917 the town was besieged and taken from the Danes by the English, although no archaeological evidence for a settled Danish presence has been found to date. The chronicler also mentions the subsequent repair and restoration of the town by King Edward the Elder, which could indicate the strengthening

of the town walls and possibly the relaying of the street grid at this time. Archaeological evidence for the 10th century is also sparse. However, once again history gives us some indication of the town's re-emerging urban status with the establishment of a mint in Colchester during the reign of Æthelred II (AD 979–1016).

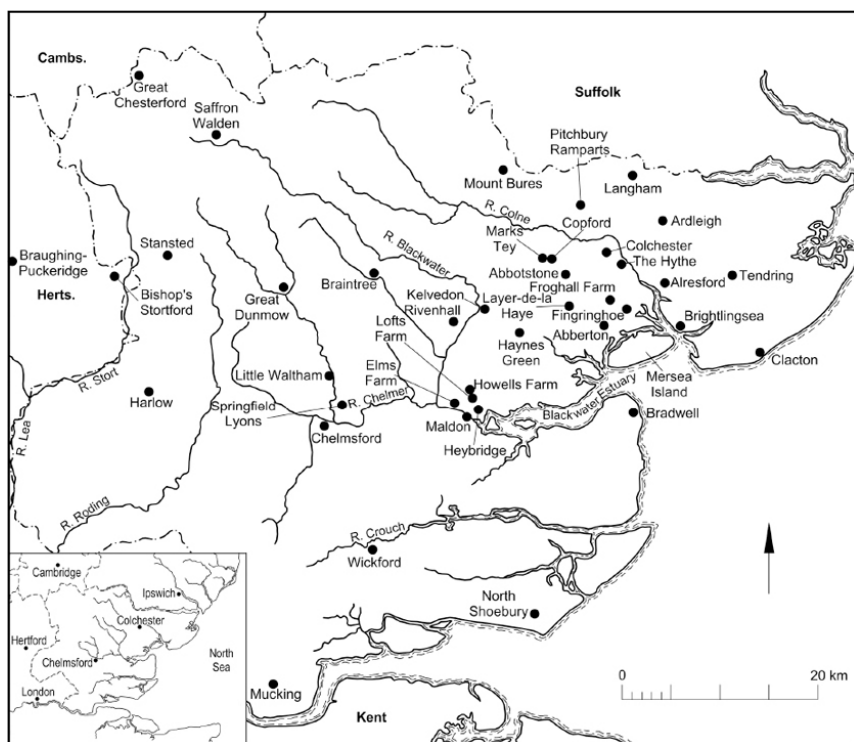


Fig 0.1 Map of Eastern England showing the location of Colchester and places mentioned in the text.

By the time of the Norman Conquest Colchester was a thriving Saxon burgh with a number of churches within its walls, including Holy Trinity, whose tower, dated to ≈ 1000 , is Colchester's finest surviving example of Saxon architecture. The Normans had a substantial and lasting influence on the town which included the construction of a castle, the keep of which was of larger size than that of the Tower of London. In 1072 William I granted the borough to Eudo Dapifer, who became very prominent in the Norman town. In particular, he founded St John's Abbey and the leper hospital of St Mary Magdalen. During Eudo's life a second monastery was created with the building of St Botolph's Priory, the first Augustinian foundation in Britain.

It is rare for early medieval structures which are neither churches nor castles to survive the ravages of cellar construction and urban renewal. The moot hall, constructed around 1160, was demolished in 1843 to make way for a new town hall, but, miraculously, a number of 13th-century structures survived until the 20th century. Six stone houses have been recorded inside the town walls and it seems likely that these buildings (now mostly demolished) were originally occupied by the town's Jewish population. None of the houses appear to have dated from after the expulsion of the Jews from England in 1290 and it is likely that the stone construction provided extra security for the occupants in these

dangerous times.

Colchester achieved self-government in the 12th century, a status that was to generate tensions between burghers and local manorial lords that resulted in a number of sieges and confrontations over hunting rights and legal jurisdiction during the next two centuries. Another key event in the early medieval history of Colchester was the relocation of the town port from Old Heath or Old Hythe to the New Hythe. The first reference to the 'New' Hythe is made in 1272, although it is possible that it had taken over from Old Heath long before this. The town records note many attempts to improve the watercourse along the Colne, with only limited success; nevertheless, the New Hythe did survive as a working port well into the 20th century.

The Black Death makes its first appearance in Colchester in 1348–9, taking a third of the population, yet its return in 1360 did not stop the growth of the town's cloth industry. By the late 14th century immigrants from across the country were being attracted to Colchester and all five mills along the Colne had been adapted for fulling. The rapid growth of the town's cloth industry was interrupted by war in Europe in the 1420s, but resumed in the mid-15th century when the Hanseatic League was at its height. The early 16th century saw the industry contract once again, only to be revived by the influx of Flemish immigrants in the 1560s. The Flemish and their cloth-making skills created a building boom in the town, the legacy of which can be seen today in the timber-framed town houses of the Dutch Quarter and elsewhere. The plague returned in 1514 and again at regular intervals until 1679. But neither the devastating Civil War siege in 1648, which led to the loss of an estimated 200 buildings, nor the death of half the population from plague in 1665–6, stopped the cloth industry thriving once again in the late 17th century.

In the 18th century the town got a glimpse of its future with the arrival of a temporary garrison during the Napoleonic Wars. This was disbanded in 1815, but the soldiers returned 40 years later when a permanent garrison was established, which to this day occupies a swathe of land to the south of the town. In 1792 Essex's first iron foundry was established just off the High Street and, with the arrival of the railway in 1843, Colchester was primed to develop a thriving engineering industry in the late 19th century. The Britannia Engineering Works, Mumford's Marine Engineers and Davey Paxman, manufacturers of steam engines and boilers, became the town's biggest employers. This resulted in terraced housing for factory employees spreading out of the medieval suburbs and consuming the land previously occupied by the Napoleonic garrison and parts of the former monastic precincts.

The 19th and early 20th centuries saw the construction of a number of major public buildings, including the Essex County Hospital (1819 onwards), the Royal Grammar School (1852–3), the Water Tower or 'Jumbo' (1882–3), Colchester North Station (1895–6), the predecessor of the present Sixth Form College (1908–9) and, most notably, the new Town Hall (1897–1902). These buildings and others have had a defining role in the appearance of modern Colchester and in some cases their construction, or subsequent redevelopment, led to some major archaeological discoveries.

The two World Wars, as elsewhere, had a significant impact on the town, although this was perhaps more in terms of social factors than the town's buildings as, apart from the February 1944 bombing of St Botolph's Corner, Colchester suffered comparatively little damage from air raids. Considerably more visible are the post-war housing estates, built from the late 1950s onwards, and the results of the redevelopment of the town centre, with first the Lion Walk Precinct (1968–76) and then the Culver Precinct (opened 1988) being constructed along with an inner ring road known as Southway (1973–4) and Balkerne Way

(1976–7). This redevelopment led to a series of major rescue excavations which have very greatly contributed to our knowledge of Colchester's archaeology.

Today, the population of Colchester is around 170,800 (according to the mid-2006 estimate) and is expected to continue to rise during the coming years. There is thus certain to be further development and redevelopment of the town and, with this, the opportunity for further archaeological discoveries in 'Britain's Oldest Recorded Town'.

1 The history of archaeology in Colchester

The antiquarians and collectors

Colchester first became the subject of scholarly curiosity about its ancient past during the Renaissance. It was in the late 16th century that the discovery of Roman coins and other remains at Colchester attracted the attention of the English historian William Camden, who included these in a topographical survey of Britain published in 1586 (Camden 1772, 356). Local interest first developed in the early 18th century when Charles Gray, a keen local antiquarian, came into possession of Colchester Castle and started a programme of repair. He assembled a private collection of archaeological objects and curiosities, which were put on display in the castle from 1756. Around the same time the Revd Philip Morant, the Rector of St Mary-at-the-Walls, published his groundbreaking *History and Antiquities of Colchester*. The book was based on an examination of town documents dating back to the 14th century that had been kept in a chest in the moot hall. It also included a section on 'Antiques, Roman Pavements, Coins, and Medals' from Colchester (Morant 1768, bk III, 182–91). Morant was apparently a flamboyant character, who wore great wigs and carried a gold-topped cane, but he was also a serious historian and his work became a landmark publication for the study of Colchester's past, setting a standard for all that followed.

In the late 18th century Colchester began to feature in the journals and publications that had emerged in response to the growing interest in antiquarian pursuits. For example, an account of 'A Roman pavement with wheat underneath it' was published in *Archaeologia* in 1773 (Hull 1958, 103 nos. 21 and 22), while in 1794 a summary of pavements in Colchester, including a description of a pavement found in St Martin's Lane in the previous year, was published in volume III of *Vetusta Monumenta* (ibid, 104 no. 25). In the early 19th century more widely read publications filtered archaeology and history into the consciousness of the town's literate classes. For example, in 1810 *The History and Antiquities of the Borough of Colchester*, a popular guide to the town's history based largely on Morant's work and intended as an affordable guide (priced two shillings), was published (Marsden 1810).

In 1820 the Colchester Philosophical Society was founded and established its own museum in Queen Street; this was unfortunately destroyed by fire in 1835. In 1821 the discovery of a carved stone Sphinx during the construction of the Essex County Hospital generated much excitement in the town, but despite this the corporation remained reluctant to commit funds to the protection of antiquities or monuments (Fig 1.1). Fortunately William Wire, a clock-maker and postman, kept a diary of discoveries made during building works between 1842 and 1857. His notes went beyond simply recording objects; he also recorded where they came from, and provided descriptions of the work and occasional sketches of features and monuments. Wire was able to supervise a number of the large public works of Victorian Colchester, such as the railway and the first deep sewers and new gas mains. He also advocated the creation of a town museum, but was frustrated in his efforts by the local establishment, who were suspicious of his radical Whig politics. At one point he tried to set up his own public museum, but lacked the funds to sustain it. Later he was forced through poverty to sell his collection, a substantial portion of which ultimately ended up in the British Museum, although some returned to Colchester. Wire's attempts to salvage information sometimes met with stiff opposition, as described in, for example, his

entry relating to the destruction of the moot hall:

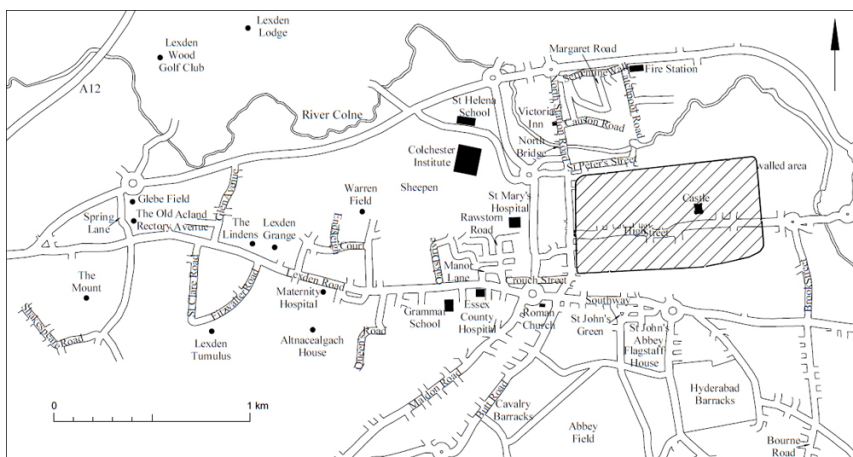


Fig 1.1 The Built-up Area of Colchester Showing Modern Streets (insert to Fig 3.2).

Visited the Town Hall works, upon Mr Jenkins saying there is the man looking after antiquities Mr. Franklin Bricklayer one of the contractors told me he would imprison any man on the works who sold me anything found there and if he knew I asked for anything found there he would transport me if he could ... so I told him I was out of reach of so ill tempered a man. (Wire nd, 4.8.1843)

Wire was central to the formation of the Colchester Archaeological Association in 1850 and held the secretary's position until being ousted by a local vicar whose political and religious views were more attuned to those of the club members. After two years the Association merged with the newly formed Essex Archaeological Society which was firmly under the control of the local gentry and which held its meetings in the afternoons when working men like Wire could not attend. On the positive side, the principal aim of the new society was the creation of a town museum. In 1846 the town council succumbed and agreed to make space in the new town hall for articles of antiquity. The accession book was opened on 2 September 1846, but it was another 14 years before the museum was opened to the public.

The deepening of local interest in archaeology corresponded with the expansion of Colchester's western suburbs and the development of urban infrastructure, which resulted in a series of exciting archaeological discoveries. Westward expansion led to the recovery of large numbers of Roman grave groups along the London Road, stimulating collectors and antiquarians to actively pursue more finds. Private collections were accumulated by individuals such as George Joslin, A M Jarmin, John Taylor and the Revd J H Pollexfen, and many of these finds eventually found their way into the museum's collections (May 1930). Taylor and Joslin comprehensively trenched their gardens at West Lodge and Beverley Road, producing remarkable collections of Roman pottery, jewellery and glass. South of the town the development of the military garrison revealed densely packed cremation cemeteries and, at Butt Road, a gravel pit disturbed a large late Roman inhumation cemetery. West of the town walls, within the grounds of the Union Workhouse, a plethora of finds was recovered, with inmates encouraged to dig pits by the possibility of financial reward for Roman objects. Beyond the north-east corner of the town walls a

brickyard produced more scattered Roman burials, while the railway cutting north of the river Colne ploughed through yet more internments. Only from the east of the town was little recovered in the 19th century, probably because East Hill had been built up from the medieval period and later Georgian terracing may have removed surviving evidence without record. By contrast, the extramural deposits west of the town benefited from the closing of the west gate in the 3rd century.



*Ancient Sculpture in Stone of a Sphinx found at Colchester
on the 17th of March 1821. & Published by E. M. A. Hay.*

Fig 1.2 The Colchester Sphinx, only part of a very large and elaborate Roman tomb, and one of the first archaeological discoveries in the town to be the subject of scholarly research (from Hay 1821).

The clergy formed the archaeological vanguard in Colchester, with the first extensive archaeological investigation in the borough taking place at Gosbecks in 1842 under the supervision of the Revd Henry Jenkins. Jenkins excavated what he believed to be a Roman villa, but which later proved to be a Roman temple. He was followed by the Revd J T

Round, who excavated part of Castle Park in 1845. Seven years later the Essex Archaeological Society held its inaugural excavation in Hollytrees Meadow; this was overseen by Dr P M Duncan and resulted in the discovery of a north-east gate in the Roman town walls, known afterwards as Duncan's Gate. Subsequently the archaeological enthusiast Charles Roach Smith made a plea to the Town Council for more funding for archaeological work, but the pace of investigation remained slow (Smith 1854, 70–1). The next significant project was in 1865, when Josiah Parish carried out the first excavation of a Roman town house on North Hill.



Fig 1.3 Displays in the Castle Museum in 1909 (Colchester Museums).

The embryonic town museum was boosted by the donation in 1849 of John Taylor's Roman grave group collection. Further interest in the town's past was stimulated by articles in the *Journal of the British Archaeological Association*: in 1847 Charles Roach Smith published an article on the standing Roman remains at Colchester, seeking to 'draw the attention of antiquaries to some of the more remarkable Roman remains still extant in the town of Colchester' (Smith 1847, 29–30). This was followed by a report on the finds of 'Roman sepulchral urns', including the famous 'Colchester Vase', found to the west of Colchester at Lexden by John Taylor (Lodge 1858, 128–32). Another boost was the donation of the Vint collection of Roman bronzes to the museum in 1852, on the condition that a fire-proof museum building be provided within three years, otherwise the bronzes were to pass to the British Museum. Spurred on by this, the then owner of the castle, Charles Round, offered the use of the castle crypt as a public museum; the space was dedicated to this use in 1855 and finally opened to the public in 1860 (Fig 1.2). Much material collected by William Wire found its way to the museum through the donation of the Acton collection in 1860, and the following year Dr Duncan donated his important coin collection. The purchase in 1892 of the extensive Jarmin collection of Roman material

from Colchester was followed a year later by the acquisition of the Joslin collection, which provided the museum with perhaps the finest private collection of Roman material gathered from one locality in the country.

The developing local interest in archaeology also extended to a concern for the surviving ancient monuments around the town, especially the Roman town walls. In 1856 Duncan published a condition survey and perambulation of the walls with a plea for their preservation (Duncan 1858a, 35). The late 19th century also saw the publication of popular guides to Colchester, which were unlike previous pamphlets as they focused on the monuments of the town rather than its history (Barrett 1893; Lingwood 1896). Important stray finds and monuments were marked on the 1st edition Ordnance Survey maps of 1876 and by the Revd Edward Cutts on the maps in his book on the history of Colchester (Fig 1.3; Cutts 1889).

The excavators

In 1909 the Morant Club was founded as a local archaeological club to supplement the pre-existing Essex Archaeological Society and the Essex Field Club. Membership was by invitation only and the club was chaired by Dr Henry Laver, who became the founder of a miniature archaeological dynasty, as he and his two sons were involved with recording the town's archaeology for nearly 50 years. Laver was a keen natural historian and archaeologist whose activities included the excavation of Lexden Mount in 1910 (at the age of 81) and the first surveys of the Iron Age dykes and Roman roads in the borough. His younger son Philip, also a medical doctor, continued the family tradition, publishing on subjects such as pargeting, mosaic pavements and local churches, and recording excavations and building work in Colchester in his diaries. Likewise, his elder son, Henry 'Ted' Laver, a master mariner whose interest was in far eastern archaeology, helped with the excavation of the Lexden Tumulus in 1924. The 1913 excavation of the Balcerne Gate by Henry Laver (senior) and Ernest Mason resulted in the first dating of a Roman structure by the modern excavation methods of careful recording and stratigraphic analysis. This excavation was continued in 1917 by Mortimer Wheeler, who became addicted to archaeology during his posting to the wartime garrison. Wheeler returned in 1920 to excavate a series of large town houses in Castle Park. The same period saw an important contribution to the study of Colchester's historic buildings and monuments in the form of a survey undertaken by the Royal Commission (RCHME 1922). This volume included accounts of the dykes and Roman remains, along with a note on every building identified as being pre-1700 in date.

Colchester's archaeology entered the modern era with the appointment of M R Hull (1897–1976) as museum curator in 1926. Rex Hull was a prolific excavator and writer who carried out numerous excavations and observations before his retirement in 1963 (Fig 1.4). In 1926 Hull helped to found the first Colchester Excavation Committee to continue the excavation of Hollytrees Meadow begun by Duncan. Four years later a second, hastily reformed, committee was established to undertake work at the Iron Age and Roman site at Sheepen in response to the building of a town centre bypass there. This was one of the first rescue excavations in advance of road building in the country. Preliminary work by Hull and his assistant E J Rudsale in 1928 had examined a gravel pit at Sheepen and established the potential of the site. A large rescue excavation was instigated, beginning in the summer of 1930 and lasting until 1939. At Sheepen, Hull teamed up with the young Christopher Hawkes, then of the British Museum, who was to form a long and fruitful relationship with the town. Hawkes and J N L Myers excavated the route of the bypass and Hull dug south of Sheepen Lane in 1930. Over the next two years Hawkes continued his work further to the

south and from 1933 to 1939 Hull worked on extending the site yet further. It was expected that the whole area would be built on, but the Second World War interrupted these plans and the site remains largely open land.

There was considerable anticipation regarding the Sheepen site, as this was the first excavation of a possible 'Celtic town'; such expectations may have been connected to some rather high notions of early British civilisation held at the time (Peers 1930, 211). However, by 1933 there was a tone of disappointment in the annual address at the Society of Antiquaries when it was revealed that Sheepen appeared not to be the anticipated early British town, but what could be more accurately described as a series of 'kraals' (Peers 1933, 219). Nevertheless, the excavation went on to produce a formative text for the study of the late Iron Age.

Hull, helped by Rudsdale and others, continued to excavate and observe throughout the 1940s and 1950s. The scope of this work was very much focused on the Roman town and suburbs, although the museum collection continued to accumulate finds of all periods. The culmination of Hull's work was the publication of a seminal volume in British archaeological literature, *Roman Colchester*, covering work on the Roman town, Gosbecks, the burial areas, the religious precincts and roads (Hull 1958). To this was added a volume on Roman pottery kilns (Hull 1963) and a series of unpublished notebooks, containing amongst other things a catalogue of Roman grave groups and a corpus of late Iron Age and Roman brooch types. Hull's legacy is considerable and it should also be mentioned that, amongst his many achievements, he was instrumental in convincing O G S Crawford to undertake the first aerial survey of the borough in 1932.

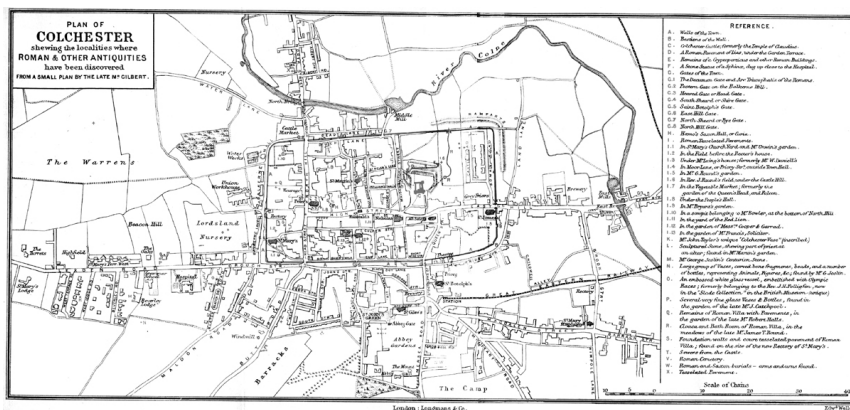


Fig 1.4 Plan of Colchester showing the find spots of Roman antiquities known in the late 19th century (from Cutts 1889).

A third Colchester Excavation Committee was founded in 1950 to undertake two research excavations, one in Castle Park and the other behind the town wall at the Technical College on North Hill. It also encompassed sporadic work undertaken by Hawkes on the dykes. Post-war rebuilding saw a number of rescue excavations undertaken on development sites in the town with the aid of grants from the Ministry of Works: for example, those at St Nicholas's Church and the Queen Street Bus Park. During the 1950s the academics, museum staff, local clergy and retired army officers who comprised the archaeological workforce of the town were joined by an increasingly enthusiastic band of amateur archaeologists. A F Hall, for instance, was a schoolteacher at the Royal Grammar

School who, between 1943 and 1961, took advantage of the fact that the school was sited over a busy Roman landscape to press-gang pupils into excavation work during school detentions. Although he did not publish a great deal his notes and plans were passed to the museum and incorporated into the thinking of Hawkes and Hull (*CAR* 11, 2). A major development in amateur involvement was the formation of the Colchester Archaeological Group in 1958, which has published an annual bulletin ever since. The group evolved out of a Workers' Educational Association course on archaeology that had been sponsored by the University of Cambridge, and continues to be involved in fieldwork around the borough.

By 1963 the pressure of development was such that it became clear that an ad hoc excavation committee would not suffice. A public appeal launched by Sir Mortimer Wheeler led to grants from Colchester Borough Council, the Ancient Monuments Division and the Pilgrim Trust. This was followed by a funding commitment from the Ministry of Works which enabled the creation of a more permanent Colchester Excavation Committee and the appointment of a full-time professional archaeologist, Rosalind Dunnett, who became the first such archaeologist in Essex. In the course of her employment at Colchester, Dunnett managed to complete a series of excavations at North Hill (in 1965 and 1970), Telephone Exchange (in 1966), Gosbecks Theatre (in 1967), the Town Walls and Mercury Theatre (in 1967–8) and at Sheepen (in 1970). During the same period Brian Blake, who had joined the museum staff in 1958, also worked on a number of sites on behalf of the museum. Preliminary reports from the 1964–5 excavations were published in a pamphlet entitled 'Challenge Accepted', along with a further plea for funds (Anon 1965). An increasing recognition of the town's regional and national significance led Colchester to be declared an area of National Archaeological Importance for funding purposes in the late 1960s.

The Colchester Archaeological Trust

In 1970 Rosalind Dunnett moved to St Albans to work on another important late Iron Age/Roman settlement, and her post was filled by Philip Crummy. In the 1960s excavation facilities had been based around the museum, but the redevelopment cycle that began in 1970 led to the creation of an independent archaeological unit. Thus the Colchester Excavation Committee became the Colchester Archaeological Trust (CAT). Excavations at this time were often undertaken under salvage conditions – for example, when Roman foundations were uncovered in 1969 at the Caters site and again in 1970 at Sainsbury's in the Wyre Street Arcade – and little could be done but observe the construction work. The new trust sought to provide a more effective response and between 1971 and 1985 CAT excavated seven major urban development sites and 30 smaller sites. The large sites resulted from a series of major town redevelopment and improvement schemes: the construction of the inner ring road; the Royal London Insurance building; the Co-op redevelopment; High Street redevelopment at the Cups Hotel; the construction of the Sixth Form College, the Lion Walk and Culver Street Shopping Centres, and the Butt Road Police Station. Five of these sites were enormous in scale, the largest being Culver Street, which covered a massive 4 acres (1.6ha).

Excavations were undertaken with grant aid from the Department of the Environment (English Heritage from 1984), Colchester Borough Council, the Pilgrim Trust and Essex County Council, along with grants from some of the private companies involved in the schemes, such as the Land and House Property Development Corporation (Lion Walk), the Royal London Mutual Insurance Society (Middleborough), the Carroll Group and Balfour Beattie (Culver Street). Additional help came from staff provided by Manpower

Services Commission Schemes. Summary reports appeared in the form of *Colchester: Recent Excavations and Research* (Crummy 1974) and *Not Only a Matter of Time*, the latter also addressing the issues of the integration of archaeology into the planning process and the desirability of preservation *in situ* (Crummy 1975, 39). The vast body of data from these excavations was synthesised and published in a series of 12 'textbook' publications, the Colchester Archaeological Report series.

Other major advances at this time were the aerial photograph surveys by Ida McMaster at Gosbecks, which revealed more of the late Iron Age/Roman field systems, and in 1976 the discovery by David Wilson of the Committee for Aerial Photography at the University of Cambridge and, independently, by John Hampton of the National Monuments Record, of a Roman fort at Shrub End. The churches of the town also received some attention (Rodwell and Rodwell 1977, 24–41), as did the castle and the Temple of Claudius (Drury 1982; Drury 1984).

Between the mid-1980s and the end of the millennium there were no excavations of comparable scale to Culver Street or Balcerne Hill; nevertheless, there has been a steady stream of excavations of medium-sized sites, either published or in preparation. The start of the 21st century has seen major excavations at St Mary's Hospital and the Colchester Garrison, the latter including the discovery of the internationally important Roman circus.

Philip Crummy has written widely about the late Iron Age and Roman town: notable among his publications is the best-selling *City of Victory*, a popular guide to the town's archaeology (Crummy 2001). Summaries of the current state of knowledge of Essex's archaeology have been published in the form of the Clacton and Writtle conference reports (Buckley 1980; Bedwin 1996), while a resource assessment for the eastern counties was published in 1997 and a regional research agenda and strategy in 2000 (Glazebrook 1997; Brown and Glazebrook 2000).

The introduction by the Government of Planning Policy Guidance Note 16 (PPG 16) in 1991 has had a major impact on excavation within Colchester. Some of the themes introduced by PPG 16 – for example, the presumption in favour of preservation *in situ* for nationally important remains and the integration of archaeology in the planning process – are echoes from *Not Only a Matter of Time*, written by Philip Crummy some 16 years before (Crummy 1975). Another crucial dimension was the introduction of the principle of developer funding for archaeological work. Since 1991 CAT has undertaken a steady flow of developer-funded watching briefs and evaluations, the results of which are held in bound volumes by Colchester Museums, or in some instances have been published in the relevant period journals and in the trust's annual magazine, *The Colchester Archaeologist*. For a period after the arrival of PPG 16, CAT provided archaeological development control advice to Colchester Borough Council and developers; however, this role passed to Colchester Museums in 1997.

In recent years other units have joined the Colchester Archaeological Trust in carrying out archaeological investigations within the borough, although the overwhelming majority of the work is still undertaken by CAT. At the start of the new millennium the pace of work showed no sign of slacking, with a considerable increase in urban regeneration either occurring or planned. In particular, four regeneration areas were created within the borough: East Colchester (around the former port at Hythe), North Colchester (the former Severalls Hospital site and Cuckoo Farm), the Garrison and St Botolph's Quarter. Of these, the last two have been especially significant for archaeological assessment and evaluation, with very valuable data being recovered about the origin of the *oppidum* and the town's southern extramural Roman cemeteries, as well as the discovery of the Roman circus coming from

the Garrison. Within St Botolph's Quarter, information has been forthcoming about the Roman, medieval and post-medieval development of the town. Other major projects included the Old Post Office site in Head Street (Fig 1.5), the former St Mary's Hospital site and several phases of fieldwork at both the Sixth Form College and the Colchester Institute. In late 2007, as the impact of the credit crunch and world banking crisis began to be felt locally, developers suspended work on their projects and there was a considerable reduction in the amount of archaeological fieldwork being undertaken in the town.



Fig 1.5 Rex Hull was a leading figure in British archaeology in the mid-20th century and established an early sites and monument record for Essex (Colchester Museums).



Fig 1.6 ‘The Head Street’ excavation in 2000, on the site of the former Post Office, was one of the Colchester Archaeological Trust’s largest projects in recent years (Philip J Wise).

2 Geology and the Deposit Model

Solid geology

The Borough of Colchester lies in the eastern sector of the London Basin, a bowl-shaped depression formed during the Tertiary Era in the thick bed of the Cretaceous Chalk. The chalk comes to the surface in north-west and south Essex, but at Colchester it lies deeply buried beneath younger deposits. Boreholes around the town have identified the Upper Chalk between 79ft (24m) beneath OD (ordnance datum) at Severalls Hospital and 135ft (41m) beneath OD at Old Heath Brewery, with records at around 116ft (35m) beneath OD in the town centre (Natural Environment Research Council data 1969).

The Cretaceous Chalk was overlain during the Palaeocene ($\approx$ 60 million years BP) by the Thanet Sand Formation, which was in turn overlain by the Lambeth Group (formerly known as the Woolwich and Reading Beds). Deposits identified as the Thanet Sand and formations within the Lambeth Group have been recorded in boreholes at a depth of 144ft (44m) beneath the surface at the Balmerne Lane Pumping Station and 143ft (44m) at the Hythe Sewage works (*ibid*).

The only Eocene ($\approx$ 52 million years BP) strata in the district are the Harwich Formation, sandy clay and silts which were formerly known as the lower part of the London Clay, and the London Clay itself, which underlie the whole of the Colchester area. The clay is stiff, dark- or bluish-grey and contains variable amounts of silts and sands, particularly towards the top and base of the formation. It weathers to chocolate or orangey-brown on exposure. In north-east Essex several hard beds of a cementstone called septaria occur in the London Clay and outcrop along the river Stour and on the beach at Harwich. It was these beds that formed a source of stone for the town walls and buildings of Roman and medieval Colchester, while the clay itself has been used for the manufacture of pottery, tiles and bricks. Surface exposures of London Clay occur around Colchester on the sides of the Colne and Roman Rivers and their tributaries. In the south of the district a ridge of London Clay passes through in a south-west to north-east direction between Messing cum Inworth and Layer de la Haye. South of this line the clay outcrops continually to Mersea Island and the coast, although in places it is covered by sands and gravels of the pre-glacial Thames and by Holocene alluvial deposits.

Drift geology

In Colchester and large areas of north and central Essex the London Clay is overlain by extensive deposits of sand and gravel which, until the 1970s, were thought to have originated solely as glacial outwash. The lower deposits are now known to have derived from a large, braided river, the pre-glacial ancestor of the Thames, which moved gradually south-east without reworking its deposits. By around 500,000 BP this proto-Thames was flowing across the county in a wide flood plain between Harlow and Colchester. The eight pre-glacial Thames terraces that resulted from this migration are known as the Kesgrave Sands and Gravels (Whiteman and Rose 1992), and are divided into upper and lower levels. These vast spreads of gravel formed flat terrace surfaces at various heights, becoming lower to the south as the river downcut.

The sand and gravel now lie largely beneath later glacial deposits but are exposed in the

sides of the major river valleys and their tributaries, where springs mark the base of the deposit at its junction with the London Clay (Ellison and Lake 1986, 25–6). The sand and gravel has been well exposed in the sides of modern quarries at Warrens Lane, in Stanway, and the disused quarry next to Kidman's Dyke at Shrub End. The deposits vary in colour from almost white to orange-brown and deep rusty brown hues, depending upon the iron oxide content. Contained within the Kesgrave Sands and Gravels are sediments which represent soils formed during warmer periods in the early Middle Pleistocene 'Cromerian Complex'. Three different interglacials are probably represented at Ardleigh, Little Oakley and Wivenhoe, to the north and east of Colchester (Sumbler and Sherlock 1996, 117).

By the beginning of the Anglian stage the proto-Thames had already established its most southerly course through Colchester and eastwards to Clacton-on-Sea where it formed the St Osyth Gravel, the youngest terrace of the Kesgrave Sands and Gravels. About 440,000 years ago the Anglian ice sheet spread south into Essex, blocking the proto-Thames in the Vale of St Albans and diverting it towards the current course of the modern Thames.

As the ice sheet advanced into Essex it deposited lodgement till at its base and sand and gravel as pro-glacial outwash. The ice sheet dumped vast quantities of eroded material to form a sheet of glacial till (boulder clay) sometimes referred to as the Lowestoft Formation. This till contains numerous fragments of chalk, flint and other rock in a matrix of bluish-grey clay. The margin of the till around Colchester coincides with the maximum extent of the ice sheet. It was probably during this period that the present-day south-eastward and southward drainage patterns in the region were initiated as sub-glacial channels and outwash streams carrying melt water and gravelly detritus away from the ice front (Rose *et al* 1976, 492–4). This resulted in the scouring of new courses, which eventually found their way to the sea (Wymer 1999, 128). Deposits of fluvio-glacial sand and gravels outcrop principally east of a line through Stanway, Birch and West Bergholt which marks the maximum limit of the ice sheet. These form a flat plateau east of the boulder clay margin and are probably the final aggradation surface of a glacial outwash plain formed at the end of the Anglian glaciation as the climate became milder and the ice sheet gradually melted. Two of the over-deepened outwash routes at Marks Tey and Kelvedon became the sites of lakes when the ice melted. At Marks Tey varved lake sediments contain pollen which demonstrates a transition from a cold period (the Anglian) through a succeeding temperate interglacial period (the Hoxnian – a 25,000-year period at this location), and back into cold conditions (the Wolstonian). Later glacial phases are substantiated by cryoturbation structures and solifluction deposits.

When the river reached the area of Southend it combined with the Medway and flowed northwards towards Clacton. At East Mersea a 'channel deposit', previously associated with the post-diversion Thames/Medway river but now considered to have been an interglacial channel of the Colne, has yielded bones of beaver, bear and monkey. Channel deposits of similar age discovered downstream at Clacton contained flint tools. In the latest Devensian and throughout the Flandrian, during a period of generally rising sea levels, the river valleys were filled with argillaceous sediments which are still accumulating as alluvium and forming flood plains.

The Colchester Deposit Model

by Stephen Benfield

Introduction

Deposit modelling is a technique designed to provide a guide to the nature and depth of archaeological deposits in towns. Urban sites, of which Colchester is a particularly important example, especially for the Roman period, are characterised by high densities of occupation over an extended time period, often up to and including the present day. This density of occupation results in the importation of material for buildings and streets as well as various items relating to everyday existence, the latter frequently becoming rubbish which is best disposed of by being buried in pits. Through time, these quantities of materials, and the displaced soil from features such as pits, accumulate. Buildings are abandoned and demolished, their structures often broken down on the site, and new buildings are constructed or other activities take place on the top of their levelled remains. Low areas, such as small valleys or stream channels, tend to accumulate deposits or are deliberately filled in. The result is a build-up of archaeological deposits, a stratigraphical and chronological sequence that can be unpicked by excavation to reveal the physical history of the site. If the settlement is provided with defences, a bank or defensive wall as at Colchester, the accumulation of deposits from the focus of occupation within the walled area tends to be greater than that of the surrounding extramural areas. Indeed, Colchester is an urban site that has, to all intents and purposes, seen continuous occupation on the same area since the Roman invasion in AD 43. The area of the town centre was surrounded by a wall in the early Roman period. Intensive extramural settlement of Roman, medieval and post-medieval dates is known from the area within about half a kilometre of the walled area.

Character of archaeological deposits in Colchester

The underlying drift geology of the ridge and the areas immediately south and west of the town is sand. The sand is generally slightly acidic and affects the potential for survival of organic finds such as bone. However, the continuous occupation in and around the town centre has incorporated organic material and other soil types which have become mixed with the sand base. The archaeological soil deposits thus usually consist of a sandy loam, and therefore preservation of finds, including some organic finds such as bone, is usually good.

The area of the most intensive and continuous settlement is that within the area defined by the Roman town wall, although extensive archaeological deposits extend beyond this area for some distance. It is clear that, at some point beyond the town centre, the deep urban stratigraphy ends and the surviving archaeology becomes more akin to that of rural sites, with little or no stratigraphy. While there is not necessarily a sharp boundary where this change occurs, it can be broadly defined by the extent of the areas of extramural settlement, and also by the area of the small valley south of the town and areas up to and around the river Colne to the north of the town.

Extramural settlement extending beyond the walled area is known for the Roman, medieval and post-medieval periods. Roman settlement is known from the north, west and south of the walled town extending up to a kilometre or more from the wall, but is most intensive within about half a kilometre of the walled area. Much of this extramural settlement appears to be centred on the Roman roads, but buildings and small streets are also known from the areas between these roads. The medieval and post-medieval extramural occupation is essentially clustered around the modern road system close to the town wall, with the addition of several important medieval religious houses, the friary of the Crutched Friars, St Botolph's Priory and St John's Abbey, all located within the area up to about a quarter of a kilometre away from the town wall.

Two valleys, that of the river Colne to the north and east of the town, and a small valley to the south, also played an important part in shaping the nature of the surviving archaeological deposits. The historic town of Colchester occupies part of the ridge of an east–west spur of land between these two valleys. The top of this ridge approximately corresponds with the line of the modern High Street. A stream that runs at the base of the small valley to the south is now culvetted and the valley partly infilled, but is known to exist beneath St John's Street. However, both this stream and the river Colne are within 100–200m of the town wall on the north and south sides of the town. The north side of the town slopes relatively steeply down into the Colne valley, while to the south the slope into the small valley is more gentle. Deep deposits are known to exist along these watercourses close to the town, parts of which are waterlogged in places, preserving organic remains (Shimmin 1994; Brooks 1999b). Various springs are also known within the walled area on the north side of the town, and waterlogging is known to have preserved timber pipes associated with one of these springs (*CAR* 3, fig 14).

Sequence and nature of the deposits

At the base of the archaeological sequence are features and finds (mostly pottery and flints) of prehistoric date (Brooks 2006a, fig 1). Much of this finds material has come from deposits of pre-Roman soil which consist of a light-grey loamy sand, described as 'cover loam', which seals the natural sand and is believed to have originated as a wind-blown deposit dating from the end of the last Ice Age. However, the original thickness of this early soil is not known and its survival on sites is patchy. The absence of an extensive pre-Roman soil may be due to the clearing of the site prior to the construction of the Roman fortress, with the Roman army literally stripping much of the soil off the site down to the natural sand (*CAR* 3, 31; *CAR* 6, 37). Where the lowest deposits have been able to be excavated prehistoric features have so far proved rare, although a few small pits containing only prehistoric material have been located (*ibid.*, 37). The assemblage of pre-Roman finds consists of small numbers of Palaeolithic and Mesolithic flints, larger quantities of pottery and flints dating from the Neolithic and Bronze Age, including a pit containing later Neolithic Grooved Ware (*ibid.*, 317–19), and some material dating from the early, middle and late Iron Age (Brooks 2006a, 9–10). These Neolithic and Bronze Age finds, including cut features, are sufficient to indicate possible domestic occupation during these periods (*ibid.*, 9–10).

Apart from thin spreads of natural cover loam containing prehistoric finds, the earliest stratigraphical layers so far encountered during excavations in the town are from the Roman fortress, begun c AD 44, and from the early *colonia*, AD 49–60. These can be seen as one major stratigraphic group because of the continuity between them which results from some of the fortress buildings being partly adapted for use in the early *colonia*. It appears that all of the buildings surviving in AD 60/1 were dramatically destroyed during the Boudican revolt.

The fortress was laid out on the ridge between the river Colne to the north and the small valley to the south (P Crummy 1997, 45), and was surrounded by a ditch and rampart (*CAR* 3, 31, fig 15, fig 18). The latter consisted of a sand bank revetted by walls of clay block on top of an oak corduroy surface. A ditch and bank of identical construction extended around an annexe on the east side of the fortress (*ibid.*, 31). Of the fortress buildings, most parts of barrack blocks have been excavated. These were constructed of timber frame with daub block infill resting on mortared plinths (*opus caementicium*) set into the natural sand. The floors were usually of clay (*ibid.*, 20, 22–2, fig 21).

In AD 49, the fortress was relinquished by the military and converted into a *colonia*. The foundation of the town did not involve the demolition and wholesale replacement of the fortress buildings by new civilian ones, but rather a more pragmatic and piecemeal approach. Some of the fortress buildings, or certain parts of them (most notably the centurions' quarters of the former barrack blocks), were retained and converted into dwellings or workshops. The fortress defences were filled in and the rampart was levelled. Given the reuse of fortress buildings in the town, the requirement of space for the necessary public buildings for the new colony was met by placing these on the site of the fortress annexe on the east side of the new town (P Crummy 2001, 56–7).

In AD 60/1, the *colonia* was completely destroyed by fire during the Boudican revolt. Destruction deposits have been encountered over the entire extent of occupation in and around the early town, from the extramural site at St Mary's hospital, 100m west of the town wall, almost to the area of Long Wyre Street on the east side of the town (CAR 3, fig 4). Following the revolt, the remains of the destroyed buildings were levelled and, within the walled town, these form a thick layer of red and brown burnt clay.

The Roman town was rebuilt over the levelled remains from the Boudican destruction. By the 2nd century the area within the wall, especially in the eastern and central area, appears to have been densely occupied with buildings, commonly well-appointed houses (P Crummy 2001, 92). The footings of these houses are usually of mortared stone that, to provide a firm base, are cut through the earlier deposits into the natural sand. Their rooms often have mortared floors surfaced with *tesserae* or mosaic. The walls of the houses appear to have been of timber and daub construction, as layers of clay demolition frequently cover the latest floor levels (CAR 3, 23). Only major public buildings are likely to have had mortared stone walls.

The town wall was constructed *c* AD 65–80 (Crummy 2003; Crummy 1999, 95–8). It was originally a freestanding structure, but an earth rampart was added *c* AD 150–200 (Crummy 1997, 86–8). A ditch about 20m wide and 4.5m deep was excavated in front of the wall, broadly following the line of the old fortress defences over much of its course on the west and south sides of the town (CAR 6, 63).

The late 3rd–4th centuries saw a decline in the density of occupation within both the walled area and the extramural suburbs. The suburbs disappeared, the houses being replaced by cemeteries, quarrying and dumping or abandonment. Inside the wall, many large houses were demolished and not replaced, so that the built-up areas appear to have shrunk, being centred on the area of the main east–west street, along the line of the modern High Street (P Crummy 2001, 118). Areas appear to have been left open and some were probably cultivated (*ibid*, 115). By this time, deposits from the earlier phases of building had accumulated to some depth, and there may have been an increasing use of wooden piles in the base of foundation trenches, rather than digging through to the stable natural sand below, to give stability.

Between the latest Roman occupation and the Anglo-Saxon or medieval occupation there is often a layer of homogeneous dark soil, commonly referred to as the 'dark earth'. This is often associated with the abandonment of areas of the town and a general impoverishment both in the nature and intensity of occupation following the Roman period. However, the dark earth is a more complicated phenomenon (CAR 3, 92). Open areas with cultivated soils appear on some sites from the early Roman period, and increasingly in the later Roman town (CAR 6, 33). In addition, dark earth continued to accumulate in some areas through the medieval period, and in some places it was almost certainly cultivated during the medieval period (*ibid*, 34). The origins and history of the dark earth in different

areas of the town are probably slightly different.

Three early Anglo-Saxon sunken-feature buildings are known from the Lion Walk and Culver Street sites (P Crummy 2001, 134–35 and 141), while Anglo-Saxon artefacts occur in small numbers on sites in the town. Early Anglo-Saxon burials are known from south of the town at Mersea Road and also probably Butt Road (*CAR 1*, fig 2).

The foundations or parts of at least seven now-demolished medieval stone houses are also known (*CAR 1*, 53–70; *CAR 3*, 29). However, the number of medieval houses excavated in Colchester is relatively low in relation to the number and extent of excavations that have taken place (*CAR 3*, 28). This is because most development sites have not included medieval street frontages, and, where they have, medieval remains have in many cases been badly affected by the construction of post-medieval and modern cellars.

In terms of deposits, there is continuity between the medieval and post-medieval periods, although the Dissolution of the Monasteries saw the closure of Colchester's four monastic institutions. Thus, most of the general comments applied to the archaeology of the medieval period remain the same for the post-medieval period. One unique aspect of the post-medieval archaeology of Colchester, however, is the traces of the Civil War siege of 1648.

Preservation of finds

The great majority of deposits at Colchester are accumulations of soils and degraded remains of building materials that preserve within them only inert finds such as ceramics or bone. Small quantities of identifiable organic remains which are usually subject to decay have been recovered when these have been carbonised or mineralised. Anaerobic deposits, where organic finds usually subject to decay can be preserved, are not commonly encountered during most archaeological recording in Colchester. This is because the main part of the town is situated on a well-drained sandy ridge and these types of deposits rely predominantly on permanent waterlogging for their preservation.

Much of the information and potential for carbonised and mineralised finds is summarised in *CAR 6* (273–87). Of particular note are the organic finds which were carbonised during the Boudican revolt and mineralised organic finds preserved in pits that had contained cess.

There are three sources of waterlogged deposits: low-lying areas around watercourses, springs, and wells (*CAR 3*, fig 14). Preserved timber of Roman date has been recovered from close to North Bridge (over the river Colne) at Middleborough House and St Peter's House, while medieval and post-medieval timber, leather and other organic materials have been recovered from Middleborough House, St Peter's House and Osborne Street (Brooks 2004d; Benfield 1998c; Shimmin 1994). There are various springs known in the north area of the town, situated on the slope of the valley of the river Colne. Excavations at the Sixth Form College have revealed preserved timbers of Roman date relating to a spring and from beneath the Roman town wall at the bottom of Balkerne Hill. Other finds of preserved Roman timber from extramural sites just to the north-west of the Sixth Form College indicate that the waterlogged deposits in this area are extensive (*CAR 3*, 146). Roman wells are known from areas where the water table is close to the surface (*CAR 3*, 26), most notably at Sheepen (Hawkes and Hull 1947, 126–8). A number of wells of Roman date are also known from the Middleborough area. Within the walled town, all of the known wells are of medieval or post-medieval date. Here, wells not directly associated with springs are usually post-medieval and about 50ft (15m) deep (*CAR 3*, 26). None of the latter have been archaeologically excavated to their base.

Archaeological deposits

One of the main limitations in modelling the deposits is the uneven distribution of known levels. This relates to the uneven distribution of opportunities in the past for archaeological recording within the town, and the nature of the available archaeological archive in providing information allowing depths of deposits below modern ground level to be calculated.

The distribution of archaeological work in the town is patchy. Some areas – for example, much of the south-western part of the town – have seen numerous excavations and watching briefs, so there is a large body of recording from which records of depths of stratigraphy can be extracted. Other areas, notably that comprising much of the Dutch Quarter and Castle Park, have seen less archaeological investigation.

However, the nature and accessibility of the archaeological archive is a major factor in the quantity and quality of information available for the modelling. The source for the depths of deposits used here is either the section drawings, reproduced with the site report, or, for some evaluations, a list of recorded depths for archaeological deposits in each trench. There is often a difference in the information relating to modern ground levels between excavations and evaluations or watching briefs, which results mainly from a difference in the aims of the two types of recording. Modern evaluations are often partly designed to specifically test the depth at which various deposits occur, while excavations are an exploration and recording of deposits. Illustrated scaled sections recorded during evaluations and watching briefs commonly include the modern surface, so depths below this can be measured directly. The results of almost all the major excavations in the town since 1970 are readily available as final publications, but, for excavations, modern deposits are cleared from the excavation area and as a consequence, the modern surface will not appear in most of the recorded sections, and in many cases does not appear among the published sections at all. Where Ordnance Datum (OD) levels appear on sections, it is often difficult to relate these to the modern ground level on the site. This is because the spot heights recorded for the modern ground level on maps are widely spaced. However, information which could be related to modern ground levels is probably contained with the original paper record of the site archive, but is not easily or rapidly accessible. In addition, a number of small sites and watching briefs which have been archived were published on microfiche, and here the depth of deposit information needed for the modelling is, again, not easily accessible.

Results of the modelling

While many of the records of the depth of deposits below modern ground level vary considerably, some general observations relating to the depth of the archaeological deposits can be made (Fig 2.1). These are essentially trends.

Firstly, data is available on the depths of the *base* of the Roman deposits below modern ground level. Within the town wall, the overall total depth of deposits, including the modern levels, tends to increase down the slope to the south from the centre line (approximately, the line of the modern High Street) of the ridge on which the town stands (Fig 2.2). The overall depth of deposits around the area of the High Street and to the south tends to be between about 2.0m and 2.5m; south of Culver Street West this increases to between 3.0m and 3.5m. In the west of the town, the depth of deposits appears to be shallower. In the area of Balkerne Gardens, at the top of the ridge, overall deposit depths are between about 1.2m and 1.5m. South of these, the depth increases to between about 1.8m and 2.2m in the area of the former Post Office (now the Odeon cinema). Little is

known of the level of the base of the archaeological deposits in the north and west of the town. Records of 2.0m at the south end of the Sixth Form College and 2.6–2.5m just north of the High Street at Angel Court and in East Stockwell Street indicate an increase in the overall depth of deposits on the slope just north of the top of the ridge. The depth of the deposits at East Stockwell Street is certainly due to a Roman building platform or terrace in that area (Benfield and Garrod 1992, 28). Total depths of deposits in the region of 0.5–1.6m are indicated in the south-east corner of the town, and about 1.0m in the south of Upper Castle Park, and there is one record of 1.3m close to North Gate.

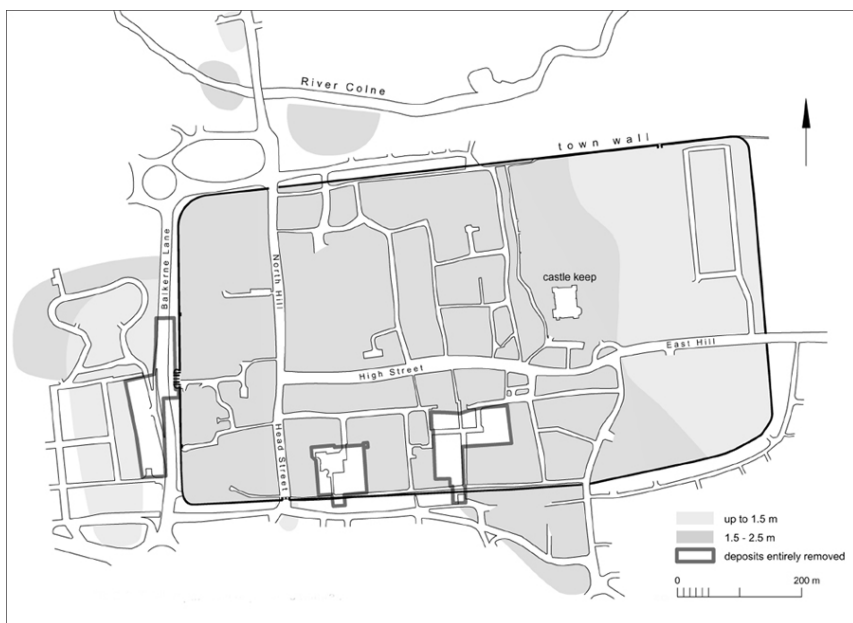


Fig 2.1 Total depth of deposits to natural.

Outside the town wall, the small amount of information available suggests that, ignoring the area of the town ditch, the total depth of deposits decreases immediately outside the walled area when compared with the depth of deposits inside the wall. However, as would be expected, the overall depth of deposits outside the town wall does increase on moving away from the wall into the lower slopes of the small valley bottom south of the town, and around the river Colne to the north. In the area of Vineyard Gate, south of the town wall, overall deposits are between about 2.0m and 2.9m deep. The very shallow depth at which natural sand is encountered immediately east of the East Gate, at between 0.1m and 1.2m, indicates a severe truncation of deposits here, as previously indicated by Rex Hull (Hull 1958, 44). The total depth of all deposits immediately south of Crouch Street is about 1.0m, increasing toward the south frontage of Crouch Street. At the St Mary's Hospital site (now Balcerne Heights), prior to redevelopment total depths of all deposits on the upper part of the slope was about 1.4m; lower down the slope, to the north, this tended to decrease to about 1.0m.

Secondly, the top of the *latest* surviving Roman deposits in relation to the modern ground level has the largest number of records available for plotting. Coverage within the town wall, while patchy, is more extensive than for any of the other periods. However, there

are very few records available for the area of the Dutch Quarter, in the central north part of the town.

For the western half of the town, the depth of the deposits below modern ground level tends to increase down the slope, away from the area of the High Street at the top of the ridge (Fig 2.2). Records indicate that the top of the Roman deposits in the area of the High Street is mainly between about 0.4m and 0.6m below the modern ground surface. To the west, in the area of Balcerne Gardens, and to the south, around Culver Street West, this increases to between about 0.9m and 1.1m. South of Culver Street West, towards the town wall, this increases again, up to about 1.6m. The depth of the top of the Roman deposits below modern ground level then decreases over the area of the rampart, immediately behind the town wall. It is noticeable that, by contrast to the situation elsewhere within the town wall, the depth of deposits overlying the Roman is much less in the area of Head Gate, being between 0.2m and 0.4m.

To the north, apart from the area between Freda Gunton Lodge and North Hill, where recorded depths are similar to those at the High Street, there is an increase in the recorded depths below modern ground level of the top of the Roman deposits until about the area of East Stockwell Street. However, there are almost no records available to this survey for the Dutch Quarter itself. The recorded depth of deposits over much of the north-west area of the town is between about 1.0m and 1.2m. There are areas of deeper recordings of between about 1.5m and 1.8m from the area just east of the Telephone Exchange site, and of between about 1.4m and 1.6m from the area of the Cock and Pie Court. In addition, the recorded depth in the area of the former tennis courts of the Sixth Form College is less than is generally recorded in the north-west area of the town, at between about 0.5m and 0.7m.

Records from the south-east area of the Dutch Quarter, around the south end of East Stockwell Street, and from Upper Castle Park, indicate that, over this area, Roman deposits are generally of similar depth below the modern ground level to those around the High Street, at between 0.5m and 0.7m. Only in the area of the putting green are greater depths recorded, at about 1.0m. The little that is known from the east end of the town – that is from about the area of Hollytrees and east of the bus station – also suggests that, overall, these deposits are also at a similar depth below modern ground level to those at the High Street, at between about 0.4m and 0.6m.

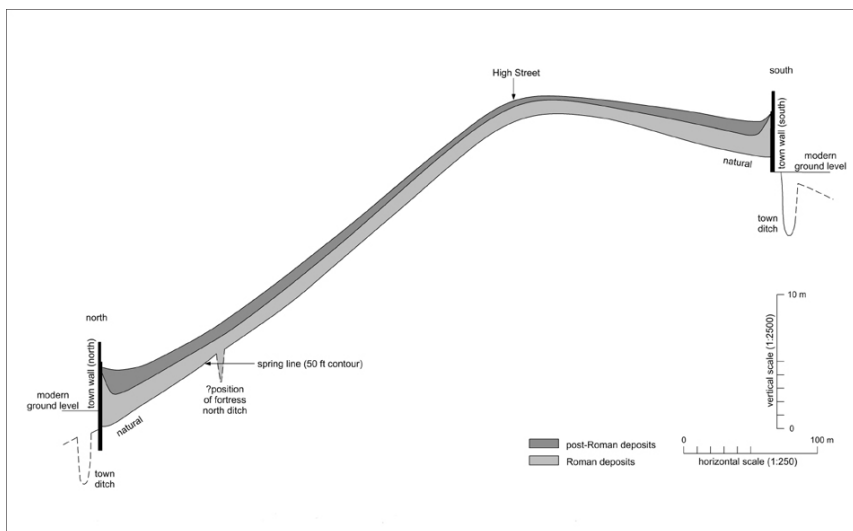


Fig 2.2 Schematic section through the archaeological deposits at the west end of the walled town.

In the area of the castle bailey, most records indicate depths below ground level of between about 0.9m and 1.2m, although there are greater recorded depths – over 3.0m below the area of the Norman defensive bank, and over 2.0m in front of the castle keep itself. A wide range of recorded depths from north of the High Street, in front of the castle keep, come from the area of the arcade in front of the Temple of Claudius and probably represent differential preservation of the upstanding elements. It is likely that, overall, the top of the Roman archaeology survives here in places to a similar level to that along the High Street. The greater depths recorded around Culver Street East are, similarly, associated with the site of a major Roman building and may be overly deep in relation to the level that might be generally expected. They could, for example, represent records of parts of deep foundations.

Outside the walled area, the overall depth of the Roman deposits below modern ground level tends to increase on moving downslope – that is, moving away from the wall into the lower slopes of the valley bottom south of the town, around the river Colne to the north, and down the slopes to the north and west of the St Mary's Hospital site (now Balcerne Heights). The recorded depths of the top of the Roman levels on the site of the former St Mary's Hospital are similar to the range of those recorded for the walled town. Over much of the top of the hill the Roman levels are from about 0.5m to about 0.7m below the modern ground level. This increases downslope to the west and north to about 1.0m and, lower down the valley, to 2.0m or more. The range of depth below ground level to the top of the surviving Roman deposits recorded at Crouch Street and North Station Road is also similar to that for the central area of the walled town. At Crouch Street, depths vary between about 0.5m and 1.1m and are slightly less at North Station Road, being between 0.4m and 0.7m.

Greater depths below the modern ground level are recorded close to the river Colne to the north and from the areas on either side of Osborne Street to the south of the walled town. Towards the river Colne, deposits are recorded as between 1.0m and as much as 2.5m close to the river on the south side. Depths below ground level also increase into the small

valley south of the town in the Osborne Street area from between 0.7m and 2.6m, recorded north of Osborne Street, to 3.0m, recorded to the south close to the St Botolph's roundabout.

Thirdly, the division of medieval and post-medieval deposits is not always clear for many sites, and too few levels are available at present to construct a map for either of these periods alone.

The largest number of records is from the west of the town, in the area of the High Street and Balcerne Gardens. Here, along the top of the ridge, the recorded depths are between about 0.2m and 0.5m below the modern ground levels. A few levels from the south-west of the town indicate that the depth below the ground level increases on this slope towards the town wall. Recorded depths here are between about 0.6 m and 0.7m below modern ground levels.

Outside the town wall the depth of modern deposits over the medieval and post-medieval levels is generally between about 0.2m and 0.5m. However, the top of the medieval and post-medieval deposits is deeper below the modern surface close to the river Colne in the area south of North Bridge, where levels vary from about 0.5m to 1.5m for post-medieval deposits and are up to 2.0m for medieval deposits. The depth of deposits below the modern ground level also increases into the small valley south of the town: recorded depths for medieval deposits in the areas north and south of Osborne Street range from between about 0.8m and 2.0m close to the walls, increasing up to about 2.4m towards the bottom of the valley. Records of post-medieval deposits for the same area vary from about 0.5m to 1.1m close to the wall to about 0.6m to 1.0m toward the bottom of the valley.

3 Prehistoric Colchester

by David Radford

Introduction

The first traces of human settlement in north-east Essex are handaxes, flint flakes and cores dating from the Hoxnian Interglacial, which began approximately 428,000 BP (based on oxygen isotope analysis). These tools were developed by pre-modern humans engaged in scavenging, hunting and foraging. The early inhabitants of the region occupied a landscape considerably different from that of today. Britain was linked to the continent and during warmer periods it was periodically roamed by exotic animal species such as *Dicerorhinus kirchbergensis* (rhinoceros) and *Palaeoloxodon antiquus* (elephant). The objects that survive from this era are almost entirely stone implements strong enough to survive redeposition by glacial streams and rivers, although in exceptional circumstances bone and wood have been found in organic lake deposits, along with animal footprints (Racham and Sidell 2000, 15). An important local find is the famous Clacton spearpoint, the only wooden artefact of its kind in Britain (Singer *et al* 1973, 43). The flint tools recovered from this time can be divided into at least two distinctive flint-working industries of the Lower Palaeolithic: one typified by handaxes and accompanying waste material (known as Acheulian) and the other characterised by the removal of flakes from cores to produce flake tools (sometimes called Clactonian). The traditional tendency has been to interpret these as distinct cultural groupings (Wymer 1996, 2), although others have argued for an alternative, functional, explanation (Ashton *et al* 1992; Ashton *et al* 1994). Human remains from this period are unknown in Essex, but have been found elsewhere in Britain (Wymer 1996, 1).

Early anatomically modern human activity associated with Upper Palaeolithic finds has been recorded in Devon dating to c 38,000 BP, perhaps related to a seasonal hunting party (Green and Walker 1991, 33). However, the Upper Palaeolithic reoccupation of Essex river valleys by anatomically modern humans began at the end of the last glaciation, around 13,000 BP. The new settlers brought with them a refined lithic technology based on the production of blades, replacing the flake tools of the Lower and Middle Palaeolithic. At this time sea level was about 30m below present levels, and although rapid warming occurred from around 13,000 BP, Essex remained attached to the rest of Europe until the 9th millennium BP, after which time rising sea levels cut it off from the continent. The land was becoming densely forested: by 10,800 BP much of lowland Britain was covered with birch and pine forest, followed by hazel, oak and elm. Faunal remains suggest that the herds of wild horse and reindeer that roamed the tundra of the late glacial period were replaced by a wider range of woodland species, including elk, red deer, aurochs and boar. Evidence for Upper Palaeolithic activity is scarce in Britain and it may be that activity was limited to seasonal hunting trips from less marginal areas. As the environment changed, however, so did human technology: Mesolithic flint industries appear around 10,000 years ago when humans adopted microliths (small retouched blades) as the dominant component of their toolkits. Essex has a far richer distribution of Mesolithic sites – mostly surface finds – than of Upper Palaeolithic ones, and it may be that Upper Palaeolithic settlement was focused along the lower parts of the Thames and other rivers, which are now submerged beneath the North Sea (Jacobi 1996, 10).

By the 5th millennium Essex was inhabited by hunter-gatherer communities who spent

much of the year close to the coast and rivers. Breaks in tree cover near fresh water were created by beavers and could be used as temporary camps by hunter-gatherers following seasonal food procurement strategies. From spring to early autumn food could be obtained by gathering plants and berries, hunting, fishing and collecting shellfish. In the winter months groups may have travelled deeper inland in search of deer, moose, aurochs and boar. The first traces of a new pattern of activity, as humans began planting crops to increase their food supply, date from the end of the 5th millennium BP. By *c* 3100 BC parts of Essex were occupied by Neolithic communities who were cultivating cereals, rearing domesticated animals, producing pottery and using a new flint toolkit which included polished stone axes, sickles, leaf-shaped arrowheads and, in later stages, maceheads and plano-convex knives. The increase in food production led to an expansion of social, political and religious organisation, a transformation that was expressed physically in the form of more substantial and durable ritual and occupation structures. Monuments such as causewayed enclosures appeared in the landscape from the early Neolithic, followed by long mortuary enclosures, henges, ring-ditches and cursus monuments. All these forms can be found in Essex, although none of the possible henge sites have been excavated and confirmed. The river terraces of eastern and southern Essex became the focal point for settlement and communal/ritual monuments. Elsewhere in Britain such sites can be associated with traces of early field systems, although similar systems have yet to be identified in Essex.

The earliest pottery vessels found in Essex are early Neolithic carinated bowls dating to between 3100 and 2850 BC. These forms were overlapped or succeeded by Mildenhall Ware; then, around the mid-3rd millennium, Grooved Ware, Peterborough Ware and Beaker pottery began to appear, the last of these accompanied by the earliest use of metalwork and new forms of flint tools (Holgate 1996, 22).

The first copper metalwork in Britain comes from south-west Ireland, where it appears in association with Beaker pottery dating to *c* 2500 BC (Budd 2000, 16). The technological advance to bronze production occurred *c* 2000 BC with the raw materials being derived from mines in Cornwall. Metal artefacts of the early Bronze Age (*c* 2000–1500 BC) include copper and bronze axes, daggers, spearheads and halberds. At this time unusually rich grave goods are found in barrows, perhaps indicating the fusion of indigenous and external traditions. Evidence for domestic structures of Neolithic and early Bronze Age date is scarce in Essex and traces of occupation generally consist only of the bases of pits and flint scatters, but both Grooved Ware and Beaker pottery are found at ritual and domestic sites, hinting at a complex pattern of continuity and change (Holgate 1996, 20).

The middle Bronze Age (*c* 1500–1000 BC) is characterised by the appearance of grouped cremation cemeteries and distinctive pottery forms of Deverel-Rimbury type. Single or multiple barrow/ring-ditch and urn-field cemeteries from this period are recorded in some number. A large amount of Deverel-Rimbury pottery has been recovered from Essex, enabling the identification of separate stylistic groups in the north and south of the county (Brown 1996, 26). The northern group is focused on the Stour and Colne estuaries, the southern group on the Chelmer-Blackwater and Thames estuaries. Other geographical differences are reflected in burial practice, with large cremation cemeteries comprising tight clusters of ring-ditches found in the north of Essex: for example, at Ardleigh (Brown 1999) and Chitts Hill (Crummy 1977b).

Evidence for settlement sites and domestic structures remains elusive in the middle Bronze Age and mainly consists of pits, although a rectangular structure of broadly Bronze Age date was recorded at Howells Farm in the lower Blackwater valley (Wallis and Waughman 1998, 109, figs 83 and 84). At North Shoebury a series of rectilinear enclosures

bounded by ditches has been recorded; one feature of the site was the apparent placing of ritual deposits near boundaries (Wymer and Brown 1995, 153). During the middle Bronze Age, loomweights are found in domestic pits, postholes and wells, reflecting the importance of sheep and pastoral farming to the economy. Cattle and pigs were also kept, and oats and wheat were grown in increasingly developed rectangular field systems, some of which have left traces in the Essex landscape (Couchman 1980, 42). The metalwork from the middle Bronze Age is of considerable interest, with new forms developed, notably a new form of axe (the palstave) and narrow-bladed swords. During this period bronze is ritually deposited in rivers or ritual pits, although such hoards are rare and concentrated in the south of the county. Stray finds of bronze palstaves are common, but of spearheads less so.

The increasing intensification and regulation of farming is suggested by the development of large co-axial field systems in southern England during the middle and late Bronze Age (Bradley 1978b). Large-scale forest clearance in Essex during the late Bronze Age (*c.* 1000–650 BC) is also traceable in the pollen cores from the Mardyke pollen sequence (Murphy 1996a, 172). A transformation of material culture at the beginning of the 1st millennium BC can be seen in the pottery forms of south-east England: there is a general trend towards more decorative pottery and the style distinction between north and south Essex disappears at this time. Late Bronze Age pottery is tempered with crushed burnt flint, gradually evolving into sand-tempered forms in the early Iron Age. New metalwork forms of this period included leaf-shaped swords and socketed axes.

There is a noticeable absence of late Bronze Age burial sites in the region, although barrow construction may have continued at Ardleigh (Erith 1975). One striking feature of this period is the deposition of metalwork, with Ewart Park-type material being ritually deposited in watery contexts, as, for example, at Mersea Island (Brown 1986, 104). There is considerable evidence for late Bronze Age settlement sites in Essex, usually circular ditched enclosures of a type common in south-east England, although rectangular forms are also known. These settlements may have combined ritual, ceremonial and domestic functions. Often settlements are comprised of substantial enclosure ditches with considerable variation of internal features, although unenclosed settlements are also recorded. During this period there appears to have been some exploitation of low-lying clay areas in addition to the established settlements on the lighter soils.

The introduction of iron objects *c.* 700 BC masks an underlying continuity from the late Bronze Age and the ongoing evolution of a pastoral and arable landscape covering large parts of Essex. Early Iron Age pottery developed from earlier styles and features grooved lines on angular bowls. A few early Iron Age inhumations are known from the county, but otherwise evidence for burials is scarce, suggesting that burial rituals must have taken a form that leaves little trace. Few sites of this period have been investigated in Essex; there is settlement evidence from the Blackwater estuary, but less from the north of the county. The existing evidence points to the predominance of defended sites located within an agrarian landscape. Round post-built dwellings have been recorded, although none have been encountered in Essex in the last 20 years of excavation. A pottery style known as Darmsden-Linton, characterised by carinated fine-ware bowls, was widely adopted in south-east Britain during this period, but has a much sparser distribution in Essex (Sealey 1996, fig 1).

The middle Iron Age is generally dated to *c.* 350 BC, but there is an evolution of pottery types and building forms rather than a marked boundary at this date. Sand-tempered wares gradually replaced the flint-gritted Darmsden-Linton pottery, although the use of the latter continued for longer in the Colchester area. There also appears to have been an evolution in

building design, with the post-built roundhouses of the early Iron Age being replaced by structures represented only by ring gullies in the middle Iron Age (Brown 1999, 177). Large numbers of roundhouses have been recorded from middle and late Iron Age sites and the population was evidently expanding during this period. There was also a growing diversity of settlement types and morphology, with a variety of small farmsteads, hamlets, open villages and enclosed defended sites developing in the landscape. One characteristic of the period is the appearance of rectangular or square shrines located within nucleated clusters of huts, a phenomenon seen at, for example, Little Waltham, Stansted and Mucking. Such shrines may also have been erected in more isolated locations, as, for example, at Chelmsford Site Z (Sealey 1996, 50). Burials remain elusive, although ritual practice may have included a severed-head cult, judging by the recovery of skull fragments from several Essex sites (*ibid.*, 51). Early contact with the Roman Empire is suggested by the appearance of Dressel 1a *amphorae* at Essex sites such as Stansted at the beginning of the 1st century BC. Coinage, based on a Mediterranean tradition and imported through Kent, appears for the first time in the middle Iron Age, although the coins were not necessarily used for trade in the modern sense. They may have been used for war payments, dowries, ransoms, compensation, temple offerings, bribes or tribute payments.

Past work

Stray finds of flints from the Colchester area have been recovered and deposited in the Castle Museum in small numbers from the late 19th century onwards. The volume of excavated prehistoric material from the study area is small, although the Culver Street excavation was of particular interest, producing traces of Neolithic settlement and an important ritual pit deposit (*see* Figs 3.1 and 3.3; *CAR* 6, 37). Small amounts of Neolithic pottery and pits have also been encountered at Gosbecks and Stanway in the 1990s. Bronze Age stray finds from the 19th and 20th centuries include a scattering of palstaves and flint axes from across the gravel terrace and a number of urn burials from the west of the town. An impressive find was made at Sheepen in 1932, where a pit was found to contain a bronze cauldron of middle Bronze Age date (Fig 3.4).

A number of significant Bronze Age sites have been excavated on the periphery of Colchester. The extensive middle Bronze Age cemetery complex at Ardleigh, which comprised at least 37 ring-ditches, was excavated by Felix Erith and the Colchester Archaeological Group between 1960 and 1974 (Brown 1999; Erith 1959; 1960a; 1960b; 1960c; 1962a; 1962b; 1963; 1966; 1972; 1975; Edwards 1959), with further trial excavations in 1979–80 by the Central Excavation Unit (Hinchliffe 1981; 1986). Ardleigh also produced evidence for a remarkable enclosed roundhouse (Brown 1999, 26–30). In 1973 a Deverel-Rimbury cemetery was excavated at Chitts Hill just to the west of Gryme's Dyke, producing a large number of Deverel-Rimbury cremations (Crummy 1979b). Philip Laver also may have excavated a Bronze Age barrow at Copford Hall, south-east of Copford, in the early 20th century, but no dating evidence was recovered (Laver *nd b*). To the south of Colchester a late Bronze Age house was excavated at Frog Hall Farm in 1975–6 (Brooks 2001), and metalwork hoards were recovered from nearby Fingringhoe in 1847 and 1985 (Sealey 1987). The only possible middle Iron Age structures recorded to date from the UAD study area are the enclosures at West House Farm (Lexden Wood Golf Club) (Brooks and Austin 2000; Orr 2002a) and at Ypres Road (Figs 3.5, 3.6; Crossan and Masefield 2004, 20–1, figs 4–8; Brooks and Masefield 2005). However, outside the study area enclosures of similar date have been examined at Abbotstone (Pooley and Benfield 2005, 1) and Stanway (Crummy *et al* 2007, 26).

The finds evidence

by Nina Crummy

Stratified artefactual evidence from this period is limited, though there are scatters of flint and pottery from many sites across the UAD study area. The largest stratified assemblage comes from Culver Street, which produced a Palaeolithic handaxe, sherds of some early Neolithic plain bowls and a ritual deposit of parts of two late Neolithic Grooved Ware vessels, as well as some Deverel-Rimbury bucket urn fragments, a few middle Iron Age sherds, and some flint and quern fragments. About 500 sherds were stratified in pre-Roman contexts (*CAR* 6, 37, 317–21). Late Bronze Age pottery and a cauldron have been found at Sheepen (Hawkes and Hull 1947, 3; *CAR* 11, 3, 134–5), and Bronze Age pottery, flints and a bronze awl on the Head Street Post Office site (Brooks 2004b, 2, 35). A summary (not complete) of the pre-Roman material culture from the town centre is given in Brooks 2006a.

There are several sites of note outside the UAD study area, with Ardleigh's Bronze Age pottery assemblage being of national importance (Erith and Longworth 1960; Brown 1999). North of Colchester, excavations at Pitchbury Ramparts hillfort produced Mesolithic and late Neolithic flints, and a scatter of pottery ranging in date from late Neolithic to Iron Age, the majority dating broadly from the 8th to the 4th century BC (*CAR* 11, 144). Late Neolithic pottery and middle Iron Age sherds have been found at Gosbecks (Fig 4.8; Benfield 1994; Dunnnett 1971b, 29, 44–5), while late Neolithic and early Iron Age pottery and early, middle and later Neolithic flints, together with some that may be Iron Age, came from Stanway, the site of a middle Iron Age settlement that produced major assemblages of pottery and loomweights and a hoard of two currency bars (Fig 4.7; Crummy *et al* 2007, 16–68). Sealey's study of the early–middle Iron Age pottery from Stanway provides a yardstick for future work (Sealey 2007). Further assemblages of middle Iron Age pottery, together with other prehistoric finds, have been found at Abbotstone near Stanway (Pooley and Benfield, 2005, 69–72 and on the Garrison site (Sealey 2006a, 25).

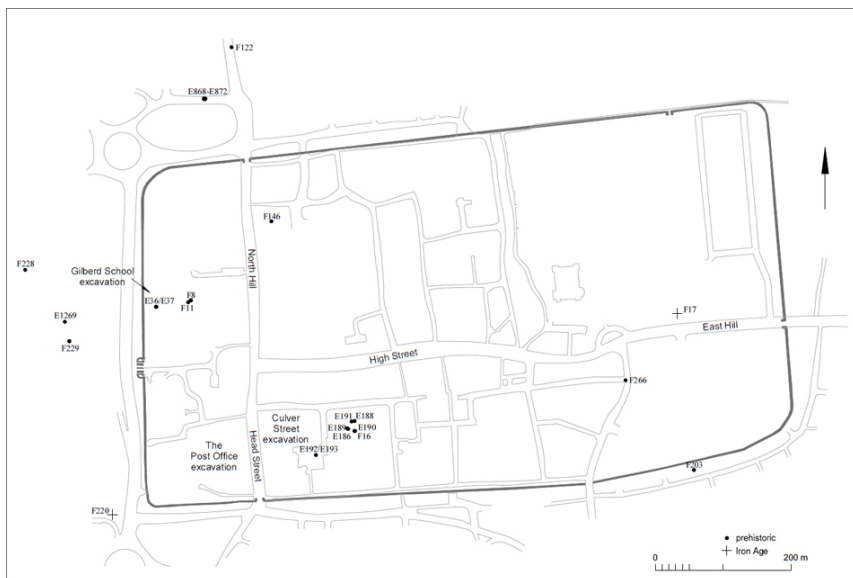


Fig 3.1 Prehistoric and Iron Age Colchester: distributions of find spots and significant elements shown in relation to the later Roman town wall.

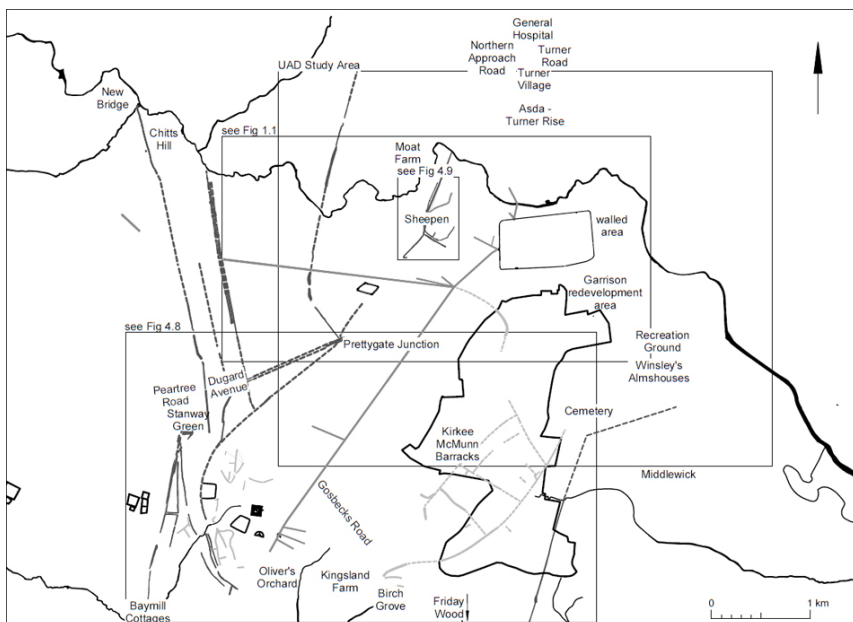


Fig 3.2 The Colchester Area showing the principal features from the Prehistoric to Roman periods, including cropmarks (in light grey), Roman Roads (in grey) and dykes (in black).

The archaeological evidence

Palaeolithic, Mesolithic and Neolithic

Colchester's contribution to the distribution pattern of Lower and Middle Palaeolithic artefacts in Essex is a scattering of seven Acheulian handaxes, which probably derive from the coarse gravel deposits located below the town (*CAR* 6, 320–1; Wymer 1985, 255–6; Niblett 1985, microfiche 3:F12). West of the town there is a site with nationally important palaeo-environmental data: during the Anglian Stage (478,000–423,000 BP) what is now the village of Marks Tey lay at the maximum advance of the ice sheet (Wymer 1996, fig 1). In the succeeding Hoxnian Interglacial, a lake formed as the ice retreated, and over time this gradually filled up with sediment. Marks Tey thus has the distinction of being the only site in Britain, apart from Quinton (Northants), where laminated lake clays contain a pollen record of the vegetation throughout the whole of the Hoxnian Interglacial (Turner 1970). An antiquarian find of a handaxe from Marks Tey (now in Colchester Castle Museum) may be associated with these deposits, and there is also a 19th-century report of possible red deer remains from this area (Dalton 1880, 20). Wymer suggests (1999, 163) that at Marks Tey 'some rich Palaeolithic site could exist around the edges of the lacustrine deposits, awaiting discovery'. At nearby Copford similar deposits have produced a rich mammalian assemblage of elephant, red deer, bison, aurochs and giant beaver (Dalton 1880, 20). Within the UAD study area, brick earth deposits at Lexden have been found to contain the remains of rhinoceros and a primitive mammoth (Shotton *et al* 1962, 19).



Fig 3.3 The ritual pit deposit excavated at Culver Square is the earliest settlement evidence from what is now Colchester town centre (Colchester Archaeological Trust).

No Upper Palaeolithic finds have been identified in the UAD study area (and only a handful of finds are recorded from the wider borough). However, Colchester has produced a modest scatter of Mesolithic flints which have been catalogued by Wymer (1977, 89). More

recent finds are a transept axe and other blades from Culver Street (*CAR* 6, 320–1), flints from Brook Street (*CAT* Report 1994/07a PX) and a single flint from St Mary's Hospital (*CAT* Report 5/97c). There is little to say about this collection other than that one transept axe from Middlewick is from a typical Mesolithic lowland valley context, and another from St Mary's Hospital could be grouped with other residual finds from nearby, perhaps part of the same occupation (Wymer 1977, 89; *CAR* 6, 321).

By the late Neolithic a small community of farmers had chosen the area that is now the Culver Street Shopping Precinct in the town centre, as a home (Fig 3.1). A number of rubbish pits were excavated at the site, including one of late Neolithic date (ELM186) which was situated away from the scatter of pottery and flints in the cover loam and contained large fragments of two late Neolithic Grooved Ware pots, with one sherd placed on a large water-worn stone, possibly a rubbing stone from a quern. The pit has been interpreted as a ritual deposit (Fig 3.3; *CAR* 6, 21, 317). Similar acts of deliberate deposition can be seen at later domestic sites at Springfield Lyons, near Chelmsford and Mucking (Brown and Lavender 1994). Another probable late Neolithic pit containing small sherds of Grooved Ware was excavated in 1994 beneath the road line of Cunobelin Way, on the northern edge of Gosbecks (Benfield 1994, 10); this was the only pit found in the 600m of road examined. Neolithic pottery was also recovered from the nearby Stanway site (Crummy *et al* 2007, 17–18). Just south of Colchester an isolated and shallow Neolithic pit at Layer de la Haye contained a carinated bowl, and was possibly a votive deposit (Hedges 1982, 114; Herne 1988, 26–7). A number of Neolithic flint implements have been recovered from the UAD study area (Fig 3.1).

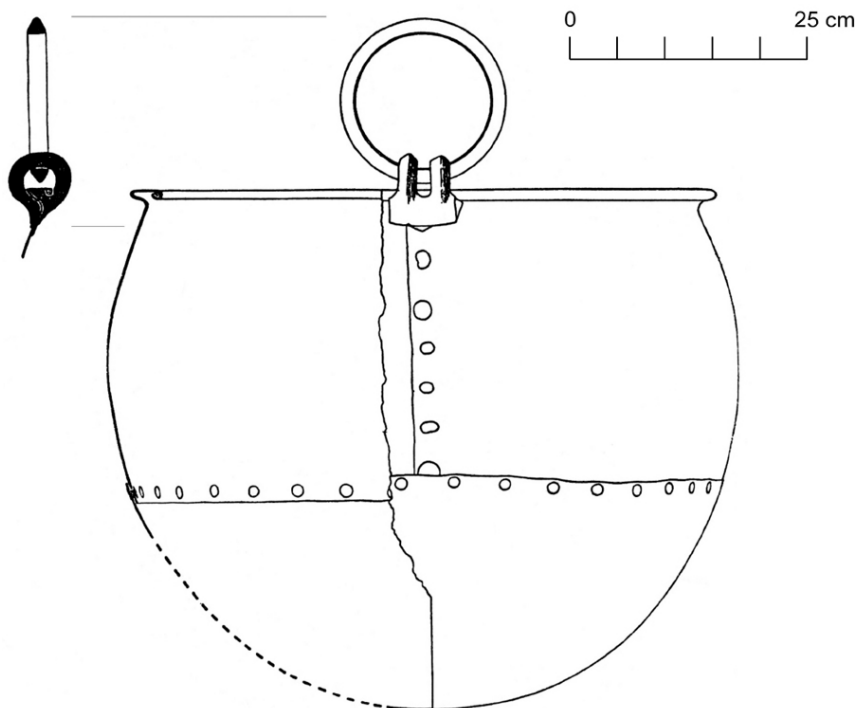


Fig 3.4 *The Sheepen Cauldron* (*The Society of Antiquaries*).

The Bronze Age

An oblate amber bead from Glen Avenue (found with a group I palstave) may be one of the few finds from Essex connected to the Wessex Culture of the early Bronze Age (Davies 1968). Other early Bronze Age finds included a sherd from 18 North Hill interpreted as possibly of Beaker type (Brown 1995, no. 159) and a small amount of Beaker pottery from the 1970s Sheepen excavation (Niblett 1985, 22, M3: A14). The most significant middle Bronze Age site in the UAD study area is that at Sheepen, where, during excavations in 1932, a bronze cauldron was found lying on its side in an oval pit measuring 5ft 6in (1.67m) long by 4ft (1.21m) across and 3ft (0.91m) deep; the pit had been backfilled with loose gravel (Fig 3.4; Hawkes and Smith 1957, 161, pl XXIIc). Until a few years ago it was widely assumed that prehistoric cauldrons were innovations of the late Bronze Age–early Iron Age, ultimately inspired by Mediterranean prototypes (ibid). It is now realised that their origins go back to the late 2nd millennium BC, the middle Bronze Age, and that they developed in northern Europe without influence from the south. The Sheepen cauldron has been dated to the 12th century BC (Sealey 1987, 13; Northover 1985). The two earliest cauldrons in Britain are those from Sheepen and Feltwell (Norfolk), and these are of major importance for the history of technology because they represent the introduction of sheet metalworking, a technique still in use for the production of motor cars and planes (P R Sealey, pers comm; Gerloff 1986, 88–92). Elsewhere at Sheepen fragmentary bronze implements were recovered from Region 3 and late Bronze Age flint-gritted pottery was widely scattered over the top of Sheepen Hill, where occupation seems to have been focused. Smaller scatters were found lower down the hill in Regions 3 and 4 (*CAR* 11, 3).



Fig 3.5 Reconstruction painting of a middle Iron Age enclosure at Ypres Road, Colchester (© Peter Froste. All rights reserved, DACS 2013).

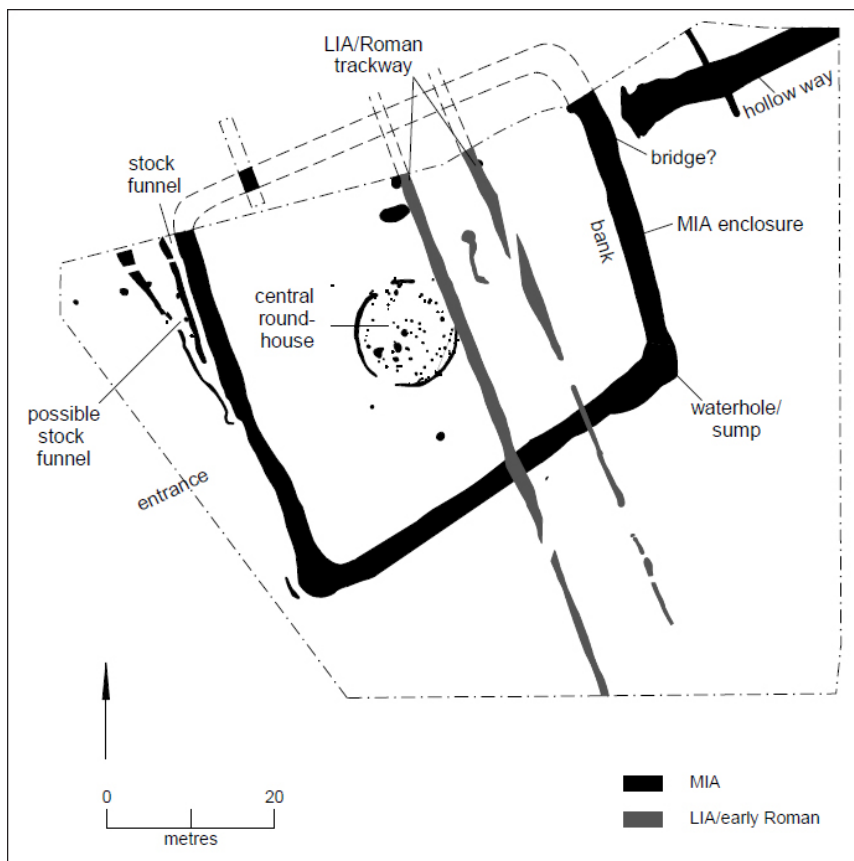


Fig 3.6 Plan of the Middle Iron Age enclosure at Ypres Road, Colchester (Colchester Archaeological Trust).

To the south of Sheepen Hill a number of features were recorded at the Kiln Road site in 1971. Here a slot, a pit and 33 postholes, many containing flint-gritted pottery, were encountered, which may have been linked to the settlement at Sheepen Hill (ibid, 132–3). Dispersed late Bronze Age settlement across the Colne-Roman River terrace is indicated by clusters of small pits recorded at a number of sites in Colchester. At Kirkee McMunn Barracks, on the south side of Colchester, a small pit (ELM1124) contained a small amount of probable Bronze Age pottery (Shimmin 1998b, 262). At the Gilbert School site (now the Sixth Form College) two pits cut into a thick deposit of periglacial cover loam (ELM36–7) were dated by late Bronze Age body sherds. Small pits were also found at St John's Abbey (ELM57–8); these contained leached topsoil and one contained a sherd of flint-gritted pottery (CAR 9, 205). At Culver Street three pits were dated late Bronze Age or earlier and one to the middle or late Bronze Age (ELM188–91) (CAR 6, 37). During an evaluation in the northern part of Gosbecks Archaeological Park a single large pit, almost certainly of late Bronze Age date, was found to contain pottery and a quantity of worked and burnt flint. The pale silty fill suggested that the soil of the time had not been heavily cultivated (Benfield 1998b, 11). To the south-west of the town, at Abbotstone, a single pit

containing a small amount of pottery from the late Bronze Age was interpreted as settlement evidence (P Crummy 2000, 5). Another late Bronze Age pit was noted at Stanway to the north of the late Iron Age Enclosure 1 (Crummy *et al* 2007, 16). One sherd of late Bronze Age or early Iron Age flint-gritted pottery was found in 1949 in the Gosbecks trapezoidal enclosure ditch (Hull 1958, 271).

At Frog Hall, to the south of Colchester near Fingringhoe, excavations in 1975–6 revealed a late Bronze Age oval pattern of posts lying slightly off-centre inside an irregular ring-ditch, set within a wider pattern of undated cropmarks. Finds included domestic pottery and a sample of horse bean that gave a radiocarbon date of 2760±80 BP (uncalibrated); other finds included spindlewhorls and struck flints. This may have been a domestic structure associated with a field system where both arable and pastoral farming took place. The ring-ditch produced no dating evidence from lower fills (Brooks 2001).

Aerial photography and excavation have identified a series of barrows around Colchester at Gosbecks, Chitts Hill, Ardleigh, Lexden and perhaps the Hythe and the Recreation Ground in Old Heath Road. Most of these remain unexamined although major excavations, which are beyond the scope of this summary, have taken place at Ardleigh. In 1973 a cemetery was excavated at Chitts Hill, to the west of Colchester, producing a large number of Deverel-Rimbury pots and demonstrating that the burials were set out in rows apparently respecting the surrounding ring-ditches (Crummy 1979b). A similar relationship was noted at Ardleigh (Brown 1999) and Brightlingsea (Clarke 1991). Another possible barrow was excavated near Copford Hall, south-east of Copford, by Laver in the early 20th century, although little was recovered except the dimensions (Laver *nd b*). An evaluation at the Moler Works Site at the Hythe in 1998 was designed to locate a ring-ditch visible on aerial photographs, but failed to locate any trace (Thomas 1998, 4). Other ring-ditches are visible on aerial photograph plots of the town with the most distinct concentration being at Gosbecks, although Hawkes noted that some of the single ring-ditches could be roundhouses of Bronze or Iron Age date (*CAR* 11, 97).

A number of Bronze Age urn burials were also recovered as stray finds from the west of the town in the 19th and 20th centuries and these have been catalogued and discussed (Brown 1995; 1999, 174). Bucket urns have been found at St Clare Road (ELM873) (Brown 1995, 161), Lexden Road (*ibid*, 157–8), Abbey Field (ELM1223) (*ibid*, 172) and Acland Avenue (ELM1224) (*ibid*, 171). Corporation workmen recovered seven Bronze Age bucket urns and two loomweight fragments from a drain trench in Water Lane (Sheepen) in 1889, the site being ‘on the north side of the cattle market’ (ELM868–872). Urns of unspecified type have been found at Dugard Avenue (Brown 1995, 156; Hull *nd a*), Butt Road in 1905 (FND206), St Mary’s Hospital (ELM1269) (Brown 1995, 160) and Shakespeare Road (ELM1272) (*ibid*, 162). A bucket urn is also recorded from outside the UAD study area at Fingringhoe (Laver 1926, 270–1).

The early and middle Iron Age

The UAD study area contains very little evidence of early or middle Iron Age activity. Hawkes claims that the late Bronze Age occupation on the top of Sheepen Hill was followed by ‘fresh occupation in the earliest Iron Age’ represented by a good deal of scattered pottery (Hawkes and Smith 1957, 161, note 4). However, neither the 1930s nor the 1970s excavations produced middle Iron Age pottery and it seems that the site went out of use at this time. An evaluation at St Mary’s Hospital to the east of Sheepen in 1997 produced a small abraded potsherd of sandy fabric typical of the middle Iron Age (FND 229, Brooks 1997a, 12). Elsewhere, at Gosbecks a dozen sherds of possible middle Iron Age

pottery were found during the excavation of the Theatre site in 1967 (Dunnett 1971b, 29, 44–5) and a single sherd was recovered from the Temple portico in 1977 (Crummy and Smith 1977). To the west of the dyke system at Church Lane, Stanway, a droveway ditch was sectioned, and produced small abraded sherds that may be early Iron Age in date. The droveway was connected to a sub-enclosure that contained typical middle Iron Age sherds in its ditch fill (Partridge 1993a, 218). To the north at the main Stanway site, pits within Enclosure 1 are early Iron Age in date and finds include a bucket-shaped pot and Darmsden-Linton pottery of *c* 650–300 BC.

Middle Iron Age features are largely absent from the UAD study area. However, recent work at Ypres Road revealed an important new discovery of this period: a roundhouse in a ditched enclosure cut by a later droveway. The roundhouse was about 12m in diameter and a shallow pit containing a disturbed cremation was found in its centre (Figs 3.5, 3.6). The cremation urn is of middle Iron Age type and its discovery enabled the roundhouse to be provisionally dated to *c* 75 to *c* 25 BC (Crossan and Masefield 2004, 20–1, figs 4–8; Brooks and Masefield 2005). Outside the study area, beyond the later dyke system, a rectangular enclosure at West House Farm (MON999) was first sectioned in 1952, when the ditch was recorded as 4ft (1.1m) deep and 16ft (4.9m) wide. The ditch fill contained some pottery, now lost, which was apparently datable to *c* 700–*c* 30 BC (Appleby 1952, CMR 1950–4, 13; *CAR* 11, 137). The site was re-examined in 2000, when an archaeological evaluation investigated the interior of the enclosure and produced middle Iron Age pottery from the subsoil (Brooks and Austin 2000). Outside the study area at Abbotstone a deep sub-circular ditched enclosure, perhaps a settlement site, was found to contain middle Iron Age pottery (P Crummy 2000, 5; Pooley and Benfield 2005, 69–72).

At nearby Stanway a linear field boundary, perhaps part of a droveway, was dated middle Iron Age, and a later sub-rectangular enclosure (Enclosure 2) built onto the boundary was associated with two currency bars and pottery of middle Iron Age date (Crummy *et al* 2007, 26, 30–1). Currency bars of this type have been suggested as ritual foundation deposits by Hingley (1990, 105–7; 2007, 33–6). The distribution of pits within the enclosure suggests that a roundhouse was located in the south-west corner (Crummy *et al* 2007, 33, fig 17). At the middle–late Iron Age transition (*c* 50 BC) a rectilinear enclosure (Enclosure 1) was added, respecting the earlier sub-rectangular enclosure and taking the same axis as the earlier boundary (*ibid*, 69–73). Elsewhere, the hillfort at Pitchbury, to the north-west of Colchester, was excavated in 1933 and again in 1973, although the investigations failed to locate any structures or provide clear dating evidence. Pottery spanning the late Neolithic to the late Iron Age was recovered in small quantities. However, a 1st-century BC date is favoured for Pitchbury's main period of activity (*CAR* 11, 138–54). At Ardleigh a middle Iron Age roundhouse was excavated in the 1960s and proved to be a substantial ring-gully roundhouse of some 'architectural grandeur' (Erith and Holbert 1970, 14, fig 11; Brown 1999, 177).

The current state of knowledge

By Philip Crummy

Our knowledge and understanding of the nature and changing patterns of prehistoric occupation in the Colchester area is patchy and unbalanced, despite the extensive list of prehistoric sites and stray finds which now exists. This is hardly surprising considering that, with the exception of Chitts Hill (Crummy 1977b), no sites pre-dating the late Iron Age have been targeted for excavation in their own right and those that have been dug have been

found accidentally during the course of excavating sites of later date.

Any assessment of the prehistoric remains in the Colchester area needs to be of a much wider landscape and, fortunately, reviews of this kind have recently appeared in print (Brown 1996; Brown and Murphy 2000; Bryant 2000; Holgate 1996; Sealey 1996). As far as can be gauged, prehistoric occupation within the Colchester area was typical of north-east Essex generally and too little is known to determine if there were any significant or exceptional concentrations which might indicate major settlements. The middle Bronze Age is disproportionately well represented, not just at Colchester but in the county generally where, for example, over 400 Deverel-Rimbury urns have been recorded (Brown 1996, 26). This is largely because of the practice of burying the cremated remains of the dead in large pottery urns which, 3,000 or so years later, are relatively easy to spot when accidentally uncovered or disturbed in ploughed fields, quarry pits and building sites. Similarly, ring-ditches make up a distinctive and easily identified component of cropmark palimpsests, particularly in the north-east corner of the county (Holgate 1996, fig 3).

Preservation

As in Essex generally, sites in the Colchester area are poorly preserved in arable fields because of the effects of deep ploughing. Preservation may be better in areas which were built over before the widespread introduction of the deep plough during the 1940s. Fortunately, Sheepen (at least on top of the hill) is well-preserved, because the site has never been deep-ploughed. The best preserved areas of all are likely to be under the Roman fortress and town, particularly in places where the topsoil was not stripped off in c AD 44–50 (*CAR* 6, 317, 779–80).

Importance

A few prehistoric sites in Colchester do merit comment. At Sheepen, the middle/late Bronze Age component of the site is likely to be of regional importance because of its exceptional state of preservation and its possible high status, as suggested by the discovery of the bronze cauldron. Excavations in the 1980s at Culver Street produced a rare late-Neolithic domestic site which is of more than local significance. A small pit contained large fragments of a Grooved Ware pot and a rubbing stone which may have been ritually buried, and in the surrounding topsoil there was a scatter of similar pottery as well as flint (*CAR* 6, 21, 37–8, 317–20). Landscape features, particularly at Gosbecks, are important, since they may have a bearing on the development of the *oppidum* in the 1st century BC. At Gosbecks, the cropmarks include ring-ditches and linear features (*CAR* 11, fig 5.1). Some of the latter may prove to be part of a Bronze Age landscape although, as far as can be judged, nearly all the ditches are likely to be late Iron Age or Roman in date.

Potential for future research

Much of Colchester is built over and not available for large-scale investigations. Nevertheless, the study of cropmark sites inside and close to the late Iron Age *oppidum* should be of value in reconstructing the landscape in which Camulodunum was eventually set. These investigations may also help to determine if Camulodunum was the first major settlement in the area or if it evolved from a series of earlier ones. Large-scale area excavation of the late Bronze Age site at Sheepen would almost certainly produce a type site for the region. Publication of the past excavations at the site would be helpful in clarifying the relationship of the site to the Bronze Age metalwork which was found there. A small investigation in 1971 showed that area excavation might reveal structural evidence (*CAR* 11,

133–6) which had been missed in the original excavations of the 1930s, when trenching was the norm. Excavations in the town centre are likely to produce more well-preserved prehistoric sites, but their discovery will be a matter of luck, and the areas available for excavation are likely to be too restricted to exploit their full potential. Finally, the exceptionally large ring-ditch at Chitts Hill, to the west of Holmwood House School, must be mentioned (*CAR 11*, fig 6.1). Known only as a cropmark, this is a site which does not fall readily into any recognisable category, and it would undoubtedly repay investigation regardless of the date that it proves to be.

4 Camulodunon in the late Iron Age, c 50 BC–AD 43

by David Radford

Introduction and historical framework

The late pre-Roman Iron Age is distinguished from what went before by the appearance of cultural and technological developments such as wheel-thrown pottery and cremation burial in cemeteries. These developments, often described as the Aylesford-Swarling Culture after their first identification at two Kent cemetery sites, appear in the wider region from the late 2nd to the early 1st century BC. However, their adoption is not uniform and communal cremation burial, for example, does not appear in Essex before c 50 BC (Sealey 1996, 57). This cultural transformation is closely similar to that recorded in Gaul, where it is sometimes labelled Southern Belgic Culture; this suggests that continental influences or settlers played a key role in its development in south-east Britain. This period also sees the emergence of political territories and tribal groupings that enter history for the first time through the mediums of inscribed coinage and Classical literature.

In the hundred years between Caesar's expeditions to Britain in 55 and 54 BC and the Roman Conquest in AD 43 it is possible to trace a significant evolution in the settlement pattern of south-east Britain. During this time a more pronounced hierarchy emerges with larger, more nucleated, sites appearing in lowland riverside locations. In the century before the arrival of Caesar the cultural influence of the Roman Empire could be characterised as peripheral, with small amounts of luxury items, such as wine, glassware and Armorican wheel-made pottery, arriving via Hengistbury Head on the south coast (Cunliffe 1987, 271–2, 183, 340).

In the late Iron Age, exchange with the Roman world became a conspicuous feature of the archaeological record. Wine was the most important single import. It is first attested in Essex at the Stansted Airport site in Dressel 1 amphorae dated to c 100 BC (Havis and Brooks, 2004a, 141 and 158). Imports of wine were joined by imports of tableware from Gaul and Italy by the end of the century, as well as by other commodities from Spain such as fish sauce and grape syrups which were transported in *amphorae*. Imports are well attested on both settlement sites and in rich graves. Imports of wine peaked c 10BC but declined dramatically afterwards and remained depressed until the time of the Roman invasion (Sealey 2009, 1). Colchester has more Dressel 1 *amphorae* than any other site in Essex. The most significant concentration comes from the Sheepen site, but the form is also present in the Lexden Cemetery and stray finds of single sherds have been reported elsewhere in field boundaries in the *oppidum* (P Sealey, pers comm). Imports were not confined to pottery; a striking example is the late first century BC glass bowl, imported from the Mediterranean, found in the warrior burial at the Stanway cemetery, which survived as an antique until the funeral in the Conquest period (Crummy *et al* 2007, 342–3). These imports were paid for by exports of the primary commodities listed by the Greek geographer Strabo: grain, cattle, gold, silver, iron, hides, slaves and hunting dogs (Strabo, *Geography* Book IV, 5).



Fig 4.1 A gold quarter-stater of Tasciovanus with the mint mark C.A.M.L. This coin was struck around 25 BC and is the oldest surviving representation of the ancient name of Colchester (COLEM: 2006.4).

Increasing contact with the Roman world, whether through trade links or diplomacy, had an impact on many aspects of life. The Latin script and indeed language were used on native coins and some limited knowledge of literacy is also evident from graffiti on native and imported pottery. Motifs on coins were drawn from the classical world and indicate some knowledge, however limited, of Greco-Roman tastes and beliefs. Although imported pottery is well attested at Colchester, translating this into terms of its influence on the broader political scene is more difficult.

The wealthiest graves at Colchester, such as some of those in the Lexden Cemetery, are eloquent testimony to the wealth and tastes of local elites. With their imported wines and foodstuffs, for the first time we see a divergence between elite cuisine and the staple fare of the population at large. It is understandable in the circumstances that many have taken the view that society at the time was becoming increasingly stratified (P Sealey, pers comm.). These tastes and developments reach their apogee in the Lexden Tumulus (dated to c 15–10 BC) where the funerary rite and the wealth of grave goods testifies to the funeral of someone from the very highest echelons of society (see page 53). On the eve of the Roman invasion the kingdom whose capital was Colchester was a state which enjoyed diplomatic relations with Rome and which covered much of south-eastern England.

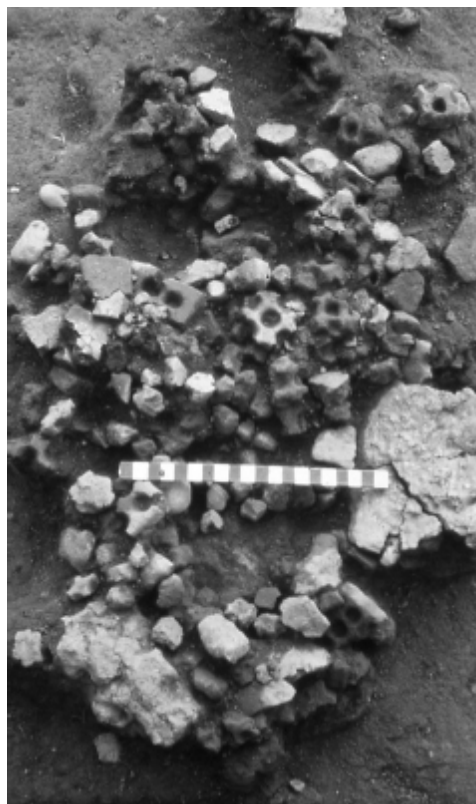


Fig 4.2 Fragments of 'coin moulds' as found during excavations at Kiln Road, Sheepen in 1971, which were used to make blanks rather than the coins themselves (Colchester Archaeological Trust).

The most politically and economically developed sites in Britain, of a type often described as expanded or territorial *oppida*, emerged at Braughing–Puckeridge and Verlamion (St Albans) in Hertfordshire and Colchester. These settlements appear to have fulfilled separate political and commercial functions. Colchester grew to combine the political and commercial qualities of both Braughing and Verlamion but on a far larger scale.

Coinage bearing the names of British leaders and their settlements appears from the late 1st century BC. This coin evidence, along with Roman historical sources, suggests that in the south-east of Britain two powerful tribal groupings or dynasties rose to prominence: the Catuvellauni of Hertfordshire and the Trinovantes of Essex and southern Suffolk. Rare coins bearing the inscription 'CAM' and minted by the tribal leader Tasciovanus appear around the years *c.* 25–15 BC (Figs 4.1 and 4.3; Kretz 2000, 49). They refer to a settlement known as Camulodunon (later Latinised as 'Camulodunum'), -dunon meaning 'high place' or 'fortress' and Camulos being a native god of war (Rivet and Smith 1979, 294–5; Mays 1992). Thus the coin evidence points to the presence of a defended settlement at Colchester by *c.* 25–15BC, presumably defended by the earliest components of the dyke system that developed around the settlement. Its earlier history is opaque, but it may be linked with the coinage called British G which circulated in north-east Essex and south-west Suffolk from

perhaps the time of Caesar's Gallic Wars and a decade or two later (De Jersey and Newman 2001, fig 1). Eventually Cassius Dio felt able to describe Camulodunon as a *basileon*, a royal seat, at the time of the Roman invasion, but this need not imply either density of population nor a multi-functional proto-urban settlement. The fortress of the war-god Camulos became the power base of Tasciovanus's son Cunobelin, who was described by the Roman biographer Suetonius as '*Britannorum rex*' (king of the Britons), the first description of this kind relating to a British king (Suetonius, *De vita Caesarum* Book IV Gaius Caligula, 44). Coin distribution patterns confirm the impression that Cunobelin was at the head of a powerful affiliation of tribes covering much of south-east Britain (Fig 4.3). Although we think of the local population as Trinovantes, their ruler Cunobelin declared himself to be a son of Tasciovanus, of the Hertfordshire-based Catuvellauni. His first gold coins are the rare *biga* series which are more or less confined to Essex. It would seem therefore that before Cunobelin created a unified polity out of the Trinovantes and Catuvellauni, his realm was confined to Essex. Although warfare must have been a factor in the development of the hegemony created by Cunobelin, little direct archaeological evidence for warfare is extant. A striking exception is the chain mail in the Lexden Tumulus (Foster 1986, 82–8).

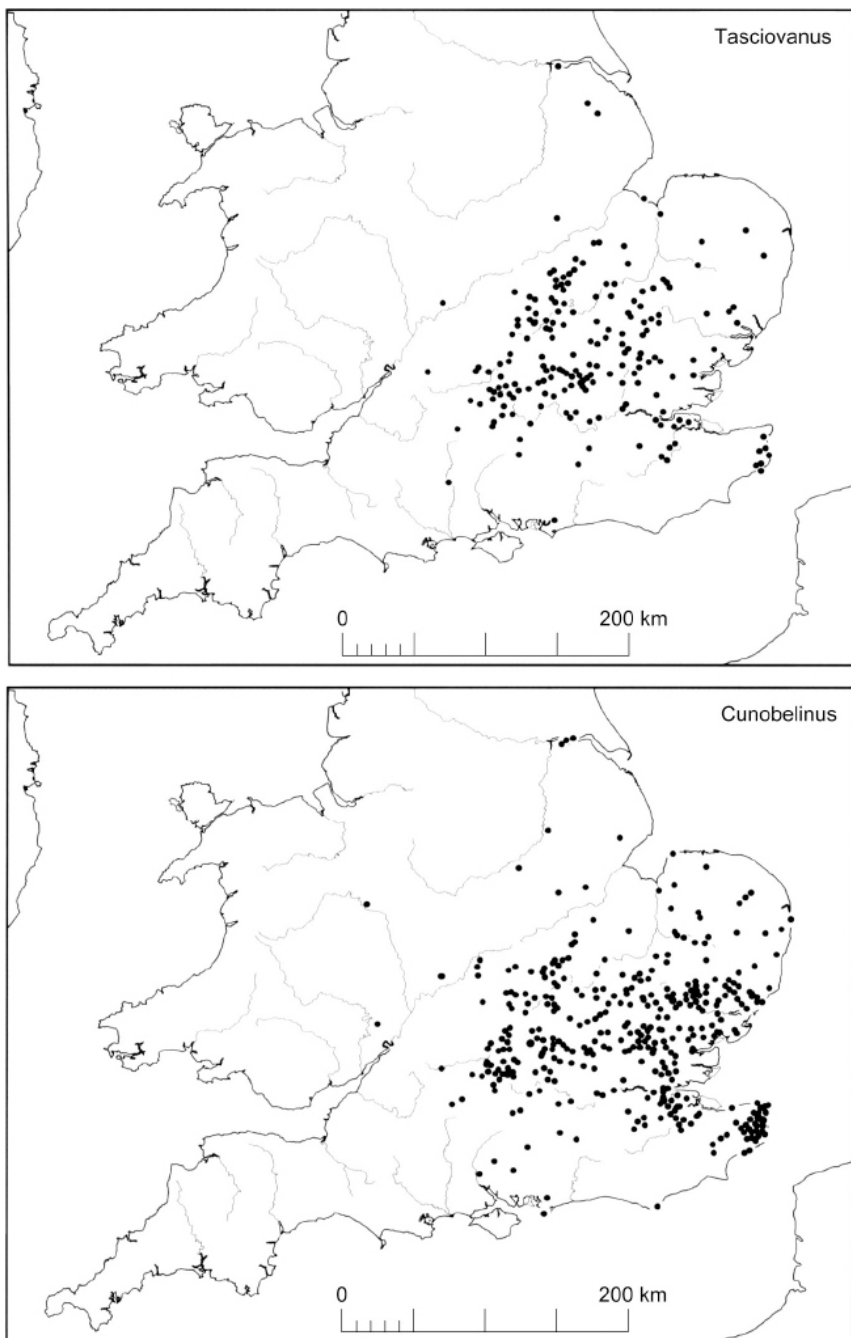


Fig 4.3 Distribution of the coins of Tasciovanus and Cunobelin (Cunliffe 2010, source CCI 2003).

By the time of the Roman invasion Camulodunon had become important enough to be

Claudius's prime military objective and it was Cunobelin's sons Caratacus and Togodumnus who led the native resistance against the Roman forces.

A crucial question is how and why Cunobelin, described by a Roman author as Catuellaunian, came to be based at a settlement in Trinovantian territory where the population is described as Trinovantian by Tacitus at the time of the Boudican revolt. Cunobelin minted coins both at Camulodunon and at Verlamion in Catuellaunian territory. The legends on these coins display some variation and, crucially, the coins that claim descent from the Catuellaunian leader Tasciovanus are centred on Hertfordshire, whereas the earliest coins minted by Cunobelin (the *biga* series) are centred on Camulodunon. The considerable debate as to the lineage of tribal leaders and the tribal status of Camulodunon has been discussed elsewhere (*CAR* 11, 53, 173; Sealey 1996, 61–3).

Past work

Curiosity about the earthworks to the west of Colchester led mapmakers the Revd Thomas Lufkin and Payler Smith to undertake the first recorded survey of the dyke system in 1722, and soon afterwards the dykes were sketched by two antiquarians, the Revd Philip Morant and William Stukeley. Morant arrived in Colchester in 1738 and set about producing a history of the town in which he challenged the view of the 16th-century historian William Camden that Camulodunon (or Camulodunum) was located at Maldon; rather, he made a case for Colchester based on the numerous gold coins of Cunobelin found in the locality (Morant 1768, bk I, 13). Stukeley also came to accept this idea, writing in his journal for 13 August 1759 of his having 'survey'd the wonderful works of Cunobeline at Colchester' (Bodl, Gough Maps 7). Others, however, were still unconvinced and the location of Camulodunon continued to be debated until the end of the 19th century: the Revd John Skinner (1772–1839), a diarist and antiquarian, argued that Camulodunon was Camerton in Somerset, where he was the vicar (*DNB* 2004, vol 50, 865), while Chesterford in Essex was another suggested location (Gould 1895). Only with the evolution of modern excavation techniques was Morant's thesis finally accepted.

The 19th century saw a rather fanciful interpretation of the dyke system by the Revd Henry Jenkins (Jenkins 1842) and, in the later part of the century, the inclusion of the dykes on Ordnance Survey maps of the town. Between 1885 and 1905 local enthusiast Henry Laver published a series of papers on the dykes. With his son Philip, he set out to map the surviving earthworks with greater clarity and located previously unrecognised sections. Their work formed the basis for the dyke entries in the 1922 Royal Commission volume (RCHME 1922, 73–4). This was followed by the first excavation of a significant late Iron Age site in 1924 when Philip and 'Ted' Laver excavated the Lexden Tumulus, which became one of the best-known and richest late Iron Age warrior burials in Britain (Laver 1927). The excavation methods used by the Laver brothers were basic and of their time, but they were considered sufficiently coherent to warrant their later reappraisal (Foster 1986).

The construction of large suburban villas along St Clare Road in the early 20th century uncovered a series of burial groups from a cremation cemetery ('The Lexden Cemetery') dating to the late 1st century BC, situated to the east of Lexden Dyke and close to the Lexden Tumulus. Unfortunately, the burials were not excavated stratigraphically and the cohesion of the different groups is uncertain (Hawkes and Hull 1947, 13–14; Hull 1958, 252–3; Birchall 1965, 310–11, 343–5; Thompson 1982, 759–66; *CAR* 11, 164–9).

The Sheepen site has been excavated on four occasions: in the 1930s large parts of Sheepen Hill were excavated by Hawkes and Hull prior to the creation of the Colchester bypass (Hawkes and Hull 1947); in 1970 Rosalind Dunnett (now Niblett) excavated near

the foot of Sheepen Hill (Niblett 1985); in 1971 trial excavations and watching brief were carried out at Kiln Road, on the southern side of Sheepen (*CAR* 11, 131–7) and in 2007–9 Colchester Archaeological Trust excavated at Colchester Institute (report forthcoming). The investigations confirmed that Sheepen was the site of Cunobelin's coin mint. A settlement is thought to have begun here c AD 5 and to have carried on until AD 61 when it was destroyed in the Boudican revolt (Crummy 2001, 15; Niblett 1985, 1, 3).

In 1932 Hawkes also found the time to oversee an excavation by Thalaso Cruso of part of Lexden Dyke. The dyke was sectioned and the entrance way examined, producing dating evidence that linked it with late Iron Age occupation at Sheepen (*CAR* 11, 35–45). This information is of considerable importance since, despite the numerous sections put across the various dykes over the years, dating evidence elsewhere has been elusive. Between the 1930s and early 1960s further sections were cut across various dykes by M R Hull, C F C Hawkes, A F Hall, R J M Appleby and B Blake in what could be described as research or curiosity-driven excavation. Subsequently, sections across the dykes have largely resulted from development pressures and often circumstances have required only partial excavation, resulting in only part profiles being recovered.



Fig 4.4 A view of Gryme's Dyke, showing the usual arrangement of an outer ditch and an inner bank. Although Gryme's Dyke is 1st century, definitely post-Conquest and probably post-Boudican, it is of the same design as earlier Iron Age examples (Colchester Museums).

Professor Hawkes's final contribution to the body of work on Colchester was published with the assistance of Philip Crummy as *Camulodunum 2* in 1995, and provided a review of work undertaken on the *oppidum* over the years (*CAR* 11). This volume includes reports on the Prettygate Junction site where, in 1956–7, Hull made a key discovery, identifying Heath Farm Dyke as underlying and thus pre-dating Lexden Dyke Middle. Also included was the 1977 section through Gryme's Dyke by the Colchester Archaeological Trust, which produced evidence pointing towards a Roman date for the dyke (*CAR* 11, 109–15).

In 1933 the first systematic aerial survey of Colchester was undertaken by the RAF. This

revealed extensive cropmarks around the known Roman site at Gosbecks, as well as five rectangular enclosures located to the north-west at Stanway. At Gosbecks the probable late Iron Age ritual/mortuary enclosure ditch was sectioned by Hull in 1936, but as he was focusing on the Roman complex built around it he did not see its possible Iron Age significance (Hull 1958, 263–4). In 1948 and 1949 the Roman Essex Society excavated at Gosbecks and found evidence of late Iron Age settlement. A section placed across the ditch of the large trapezoidal enclosure south of the Roman temple confirmed that it was also of this date. More detailed aerial photography was carried out in 1950s by Dr St Joseph, who flew at 300m, considerably lower than the RAF's 600m. This showed up the complexity of the Gosbecks field systems and Hull was able to establish that a pre-Roman system underlay the later boundaries (ibid, 261). During the hot summers of the 1970s the Royal Commission and Ida McMaster were able to build up an even more detailed aerial view of the cropmarks surrounding Gosbecks and Stanway. Using this information, Philip Crummy proposed that Gosbecks, and not Sheepen, was in fact the heart of the Iron Age settlement (Crummy 1979a; 1980b, 8).

In the 1980s a review by Jennifer Foster of the Lexden Tumulus material helped to clarify the nature of the burial rite, and a study of the Sheepen *amphorae* was undertaken by Paul Sealey, who proposed an explanation for the presence of late 1st century BC *amphorae* at this early 1st century AD settlement (Foster 1986; Sealey 1985). C F C Hawkes maintained his links with the town by editing and publishing the pre-Roman section of Hull's corpus of brooches (Hull and Hawkes 1987). In the late 1980s a major advance in research came with the designation of the Stanway site for mineral extraction and the opportunity to excavate the late Iron Age and early Roman enclosures there between 1986 and 1995. This site produced a spectacular sequence of rich chamber and satellite burials (Crummy *et al* 2007).

The creation of an 'archaeological park' at Gosbecks in 1994 was accompanied by the excavation of land north of the park prior to the building of a housing estate. Here traces of late Iron Age/early Roman occupation and field boundaries were recorded. In the late 1990s a series of research excavations was carried out in the Archaeological Park itself, involving the sectioning of the mortuary/ritual enclosure ditch and the investigation of field boundaries of late Iron Age/early Roman date on the site of a proposed visitors' centre (Benfield 1998b). In addition, ongoing geophysical work being undertaken by David and Aileen Black, Tim Dennis and Peter Cott is gradually building up a detailed picture of the field system.

Elsewhere in Colchester small-scale excavations, evaluations and watching briefs have encountered late Iron Age pits, ditches and pottery, which, along with various stray finds, have produced a fragmented picture of activity within the *oppidum*. In 1999–2000 the opportunity arose to excavate a late Iron Age farmstead enclosure at Abbotstone just to the west of the dyke system (P Crummy 2000; Pooley and Benfield 2005).

The finds evidence

by Nina Crummy

Taken individually and together, the finds from late Iron Age Camulodunon, the early fortress (Chapter 5) and pre-Boudican *colonia* (Chapter 6) have enormous research potential, providing opportunities to chart the supply and usage of groups of artefacts and ecofacts within each discrete period and throughout the transition of the area from a late Iron Age *oppidum*, to a legionary fortress with an adjacent *canabae* and industrial area, and

then to the first provincial capital of Roman Britain. All three sections on the finds evidence for these chapters should therefore be considered not only as brief introductions to the published literature concerning the assemblages from each period but also as indications of the material that might usefully be explored in greater detail both *within* and *across* the periods. It should be stressed here that 'published literature' covers not only conventionally published books and articles but also the online series of Colchester Archaeological Trust Reports that are available at <http://cat.essex.ac.uk>, which has a facility for searching by keyword. The keywords available for artefact and ecofact searches are very limited, but most of the relevant reports may be found by period-specific searches. Much of the printed literature is also available online at the same website, including articles concerning Colchester in the *Transactions of the Essex Archaeological Society*, now *Essex Archaeology and History*.

Looking beyond the study area, the strong political ties between Camulodunon and Verulamium in the late Iron Age provide opportunities for both comparing and contrasting the material culture and cultural practices of each place, while the links and distinctions between the Trinovantes and Catuvellauni can also be defined by setting elements of the finds assemblage from the study area within the context of those from the wider zone of Cunobelin's political and economic influence (for example: Haselgrove 1982; Pitts 2005; Eckardt and Crummy 2008, 76–9, 84–90). Different perspectives can be obtained by comparing aspects of the finds assemblages from Camulodunon and its hinterland with those of its northern and southern neighbours, the Iceni and the Cantii, and there is also considerable research potential in comparisons drawn between the material culture of Camulodunon and the assemblages from the Atrebatan *oppidum* of Calleva at Silchester and that of the Brigantes at Stanwick (Fulford and Timby 2000; Haselgrove forthcoming).

The late Iron Age finds from the study area can be divided into funerary and non-funerary assemblages. The majority date to the period of Cunobelin's political supremacy and reflect a period of economic prosperity marked by new types of indigenous products and new types of imported goods. Earlier material, most notably the burial assemblage from the Lexden Tumulus, shows that some decades before Cunobelin the area already supported a wealthy and prestigious elite with strong trade links to the continent, and, suggested by a mounted *denarius* of Augustus found in the tumulus, possibly also personal links to the imperial family in Rome (Foster 1986; *CAR* 11, 85–94).

The grave goods from the late Iron Age burials provide a distinctive assemblage of native and imported pottery, metalwork and other items from the period running from the second half of the 1st century BC to the years immediately following the invasion of AD 43. Of particular importance in this respect are the funerary enclosures at Stanway (Crummy *et al.* 2007), the Barnhall cemetery (*CAR* 11, 170) and the Lexden Tumulus together with other graves in the Lexden area (Laver 1927; Hull 1942; 1958, 252–3; Birchall 1965; Thompson 1982, 758–66; Foster 1986; *CAR* 11, 85–94, 127–30, 164–70). The value of these closed assemblages for further study is evident from a detailed examination of *amphorae* from funerary sites in and beyond Camulodunon that has highlighted a decline in the importation of Italian wine in the late 1st century BC and a subsequent shift to imports from Spain (Sealey 2009).

The burial deposits in the Lexden Tumulus, with a date of c 15–10 BC, were recognised at the time of its excavation as unique. They included imported and native British wares, furniture, figurines, chain mail and precious metal items, all broken or damaged in some way (Foster 1986). The ritual breaking of grave goods was also evident in some of the funerary features at Stanway and at Folly Lane, Verulamium. Philip Crummy has suggested

this was a distinctively Catuvellaunian ritual practice that illumines the origins of Camulodunon and adds to the evidence for its existence by the last quarter of the 1st century BC or earlier (Crummy *et al* 2007, 447–56). The tumulus lies within the Lexden Cemetery and is close to an area used for cremation burials from c. 50–10 BC. Pedestalled urns and carinated cups are the principal forms in this assemblage and none need be pre-Caesarean (*CAR* 11, 164–9; Birchall 1965, 310–11; Thompson 1982, 759–66). There are scattered late Iron Age burials in other parts of the study area, and a 1st century BC mirror found during building works at Hyderabad Barracks just south of the town may have come from a disturbed cremation burial (Sealey 2006b).

As a group, the complex of funerary features at Stanway spans the late Iron Age and early Roman periods. As well as pottery and metalwork, some contained high-quality wooden objects and imported glassware dating to the pre-Conquest period. Broken pottery in the ditches of the funerary enclosures is markedly different in character from the vessels deposited in the burials and points to feasting playing an important part in the funerary rites. Other particularly distinctive elements of the assemblage are the evidence for literacy, board games, surgical and medical equipment and practice, and the use of cosmetics in the Late Iron Age (Crummy *et al* 2007, 69–377). Ecofacts associated with Colchester's late Iron Age burial sites are far more scanty than the artefacts, but the plant macrofossils, pollens, charcoal and faunal remains from Stanway provide a benchmark for future research (*ibid*, 384–99).

The non-funerary assemblages come mainly from Sheepen, effectively the industrial zone of Camulodunon, and Gosbecks, a largely agricultural area that was probably the location of Cunobelin's farmstead and may also have been a focus for ritual activity (Hawkes and Hull 1947, 46–51; *CAR* 11, 70–84, 95–8; Crummy *et al* 2007, 447–9).

The settlement at Sheepen has produced nationally important stratified assemblages of pre-Conquest material, notably Iron Age coins and both native and imported pottery, brooches and other metalwork (Hawkes and Hull 1947, 133–42, 161–281, 308–32, 341–4; Sealey 1985; Haselgrove 1987b). Since the excavations of the 1930s, the date of the earliest occupation at Sheepen has always been the subject of debate, hinging largely on the presence and dating of some Dressel 1 *amphorae* (Niblett 1985, 23). To this can be added the deliberate exclusion of 1st century BC boss-on-bow brooches from the brooch report in Hawkes and Hull 1947 on the grounds that they conflicted with the preferred start date of the early 1st century AD. More generally speaking, the phasing of the 1930s excavations is not now considered to be accurate and far more of the assemblage is therefore likely to be pre-Conquest than originally thought. Refinement of the phasing, including an earlier start date for the settlement, impacts upon analyses of the 1930s finds and on the results of comparative studies (*CAR* 11, 80–1). For example, far more Arretine, other ceramic fine wares and glassware from Sheepen may be pre-Conquest than is generally presumed, and conclusions about trade and consumption previously drawn from these assemblages may not be accurate. Similarly, much material in genuinely post-Conquest features is residual Late Iron Age (Niblett 1985, 22–3). Despite these constraints, strong pre-Conquest trade links to the continent are evident in the presence of Augusto-Tiberian Arretine and Gallo-Belgic wares, wine *amphorae* and large numbers of Gallo-Roman Rosette and Langton Down brooches; much of Cunobelin's wealth must have derived from these imported goods (Hawkes and Hull 1947, 168–286, 308–20; Sealey 1985). A catalogue of the Gallo-Belgic wares from Sheepen is now available online (Timby and Rigby 2007). The assemblage of British-made pottery from late Iron Age Sheepen is also a valuable resource, allowing comparisons to be made between pre- and post-Conquest assemblages on the site that add

to studies of trade, consumption and identity (Crummy *et al* 2007, 279–90). Some pottery may have been made at Sheepen, but there is no stratigraphic and very little artefactual evidence to support this (Hawkes and Hull 1947, 281; *CAR* 10, 488).

The late Iron Age finds assemblage from the Sheepen excavations of the 1930s has now been supplemented by that from the Colchester Institute (Colchester Archaeological Trust, 2007–9). The finds from some of the features, or in some cases the absence of 1st-century AD Gallo-Belgic ware, suggest that Camulodunon was in existence as early as the mid-1st century BC. To date, the Institute material remains largely unprocessed as the project had to be halted due to the economic downturn of the late 2000s affecting centralised funding for building works at educational establishments. Study of this assemblage should enable a full reassessment of the start date of Iron Age occupation on the Sheepen site.

The coinage of Cunobelin has already enabled some refinement of the Sheepen dating, stressing the usefulness of the assemblage for studies of the chronology of the late Iron Age as well as for theoretical analyses of identity, wealth and prestige (Haselgrove 1987b; van Arsdell 1989; Hobbs 1996; Creighton 2000). An associated element of the pre-Conquest Sheepen finds assemblage is a quantity of coin flan moulds and other industrial debris from Cunobelin's mint. This material is similar to assemblages from both Britain and France, and in particular to several from sites in Hertfordshire associated with the Catuvellaunian *oppida* there; they can also be matched at Silchester (Fig 4.2; Hawkes and Hull 1947, 129–33; *CAR* 11, 81, 131, 133–6; Cunliffe 1991, 486–7; Niblett 2001, 43, 51–2; Niblett and Thompson 2005, 24, 35–6; Fulford and Timby 2000, 413–15). Structures and debris associated with the manufacture of other metal objects are very scarce in the pre-Conquest period (Hawkes and Hull 1947, 341, 346), but this may be due in some part to the phasing problems mentioned above, and future work on the Colchester Institute assemblage may present a different picture. It is certainly likely that the pre-Conquest one-piece brass Colchester brooches that occur in large numbers at Sheepen were made there. Similarly, the manufacture of iron objects somewhere in the area can be inferred from the local use of distinctive items such as firedogs. Given the lack of local ores, it is probable that copper alloys and iron were imported in the form of ingots and smith's bar iron.

Salt from local coastal salterns (red hills) may be another source of Cunobelin's wealth (Hawkes and Hull 1947, 347; Rodwell 1979, 159–60; Fawn *et al* 1990) but, because of the recovery on inland sites of both briquetage vessels and salt-making hearth furniture, the mechanisms by which this commodity was marketed are not yet fully understood. There would have been competition for inland markets from the Icení and Corieltauvi to the north (Rodwell 1979, 159–60, 172; Eddy 1982, 26; Barford 1990, 79; Sealey 1995, 68–9; Lane and Morris 2001). In addition, Stanway points to salt being used in some way in funerary rites (Crummy *et al* 2007, 375–7). A small number of loomweights and spindlewhorls are evidence for textile manufacture at Sheepen, implying not only self-sufficiency in cloth production but also the keeping of flocks containing a proportion of mature animals to ensure a steady supply of fleeces (Hawkes and Hull 1947, 349; Crummy *et al* 2007, 43–5). All the loomweights from Sheepen were from contexts phased as post-Conquest, but these objects are a standard feature of pre-Conquest sites in the area and some of these items, like those from the middle Iron Age settlement at Stanway, may predate the *oppidum* (Pooley and Benfield 2005 312, 383, 485). Sheep are not represented in the pre-Conquest faunal assemblage at Sheepen, although they do occur in supposedly post-Conquest contexts and the problems of mis-phasing apply equally to animal bone as to other finds. Species identified in securely pre-Conquest levels include small horses and oxen, which, like other finds from the site, provide the basis for comparison with other late Iron Age settlements

and with post-conquest assemblages (Hawkes and Hull 1947, 350–3). Ravens and buzzards were among the birds identified at pre-conquest Sheepen and they may represent ritual activity of some kind (ibid, 354). Environmental remains consisted only of charcoal and some bracken (ibid, 356).

Gosbecks is part of an agricultural landscape that developed from at least the Bronze Age (Benfield 1998b, Benfield 2008a, Pooley and Benfield 2005 and others in preparation). It has been far less intensively excavated than Sheepen, but has produced pottery, brooches, loomweights and spindlewhorls dating to the pre-Conquest period (Benfield 1998b, 127). No Arretine pottery has been found there, and very little Gallo-Belgic ware, but a fragment of a Dressel 1 *amphora* of a form generally considered to have gone out of use in the mid-1st century BC adds to the evidence for Camulodunon being of earlier origin than first proposed (Benfield in prep a).

The finds from the various sections across the dykes are not numerous but are critical in dating the defensive system; they are discussed in detail in *CAR* 11 (106–60).

Within the town late Iron Age finds are scarce, although they include some coins and brooches (*CAR* 4, 15–16; *CAR* 6, 294–5; *CAR* 2, fig. 2, 16; Hull nd c, no. 0325; Wire nd, 22/5/1852). One brooch is a mid-1st century BC form (*CAR* 2, fig. 2, 16). The varied origins of the coins and the comparatively high number of coins to other Late Iron Age material suggest that they may relate to immediately post-Conquest rather than pre-Conquest activity.

The archaeological evidence

by David Radford

The oppidum

During the late Iron Age Camulodunon occupied an area of around 28 square miles, located on the gravel plateau and mainly between the valleys of the Colne and the Roman River. It was bounded by earthworks or dykes in the west which linked the rivers and created a defended perimeter of water, marsh and forest (Fig 3.2). The dykes on the western side of the *oppidum* were formed of two overlapping arcs; one arc (the Lexden Dyke) protecting the trading settlement and mint at Sheepen, while the other (the Heath Farm Dyke) defended the large sub-rectangular farmstead enclosure and a possible ritual enclosure at Gosbecks (Fig 4.8). The eastern boundary of the *oppidum* is less clear and appears to have been formed from the natural boundaries of the rivers. Within the perimeter of the dykes was an extensive farm estate with networks of fields, droveways and trackways linking stock enclosures and dispersed settlements. Many of the habitation sites would have had their own cemeteries, for example the Lexden Cemetery (Fig 4.6). The burial site at Stanway lies just outside the dyke system, but must have been intimately linked with the *oppidum* (Fig 4.7; Crummy 2001, 13; Crummy *et al* 2007, 1). The exact chronology of development is not fully understood, but it appears that the settlement was in existence by c 15 BC and flourished and expanded from c AD 5 until the Claudian invasion and beyond.

At Camulodunon the scale of the settlement, along with its earthworks, extensive farmland and evident material wealth, can be contrasted with the lack of evidence for any sizeable population (*see* page 39). In this respect the Latin noun *oppidum*, meaning town, appears completely inappropriate. No proto-urban centre has been found at Camulodunon: it appears to be an extensive royal farm estate, albeit with distinct activity zones and boundaries, influenced by Roman culture but retaining strongly native characteristics and

traditions.

The dykes

A series of eight defensive or territorial lines can be identified in the Colchester dyke system, excluding the earthworks currently thought to be Roman in date (Figs 3.2, 4.8). The dykes have been subdivided using archaeological, geographical and subjective criteria into 30 named stretches of bank and ditch. The main defensive lines of known or possible late Iron Age date are, from east to west: 1) Berechurch (MON838)/Barnhall Dyke (MON837); 2) Sheepen phase 1 and 2 (MON400); 3) Lexden Dyke North, Middle and South (MON830, MON831, MON828)/Moat Farm Dyke (MON832); 4) Heath Farm Dyke (MON829); 5) Shrub End Dyke (EHCR11640); 6) Prettygate Dyke (MON763); 7) Kidman's Dyke (EHCR11630)/Layer de la Haye Dyke/Oliver's Dyke (EHCR11631); 8) Gosbecks Dyke (EHCR11634). Another stretch of possible dyke was recorded in the vicinity of Horkesley Heath in the 17th century, but this remains unconfirmed (Morant 1768, bk I, 92–3). If this observation is correct then the dyke would link two tributaries of the Colne, Black Brook and Salary Brook, and dramatically expand the defended area (*CAR* 11, 50, fig 2.26; Crummy 1999b, 88, fig 1). A number of reproduced plans of the dyke system have adopted the habit of extending the line of Shrub End Dyke to follow the route of Straight Road and Gosbecks Road all the way to Barnhall. While the geography of these roads is certainly curious, an excavation across the projected course of Shrub End Dyke at the northern end of Gosbecks Road failed to reveal any trace of the dyke here (*CAR* 6, 924).

The dykes consist of U- or V-shaped ditches, varying in depth from 1.5m on parts of Heath Farm Dyke to at least 4.6m at Lexden Dyke Middle (*CAR* 11, 32 and 37). The upcast was used to form an internal bank: the largest surviving stretch of bank, at Lexden Dyke Middle, stands 3m high and may have originally stood to 4m. The combined bank and ditch therefore created a defensive slope of up to 9–10m. The upcast was sometimes placed on stripped topsoil, the turf presumably being used to consolidate the bank profile. No conclusive evidence for revetment or defended gateways has been recovered, although a cylindrical posthole 1.2m deep at Lexden Dyke Middle was interpreted as part of a revetment (*ibid*, 43–4), and a possible turf or clay revetment was postulated for Sheepen Dyke (Hawkes and Hull 1947, 60). Also at Sheepen, the stumps of two stout timber stakes which were found butted against one side of an entrance through the dyke were interpreted as part of a wooden gate structure (*ibid*, 58).

At present the earliest dyke appears to be Heath Farm Dyke Middle, which curves around the Gosbecks trapezoidal enclosure and surrounding field systems. Excavations by Rex Hull at Prettygate Junction in 1956–7 showed that the dyke is cut by Lexden Dyke, which has been dated to *c* AD 5–43 (*CAR* 11, 48–50). Heath Farm Dyke is small in comparison to later dykes (measured sections show that the ditch varies in depth from 1.5m to 2.4m and, interestingly, both U- and V-shaped profiles have been recorded, leading Hawkes to suggest that less centralised control was being exerted over different work teams at this time (*ibid*, 30–3, fig 2.14). Later dykes appear to be more uniform.

The problems encountered when dating the dykes are demonstrated by Sheepen Dyke, which was sectioned several times in the 1930s (Fig 4.9). This produced only two identifiable late Iron Age pottery forms as dating evidence for its construction (*Cam.* 218 and *Cam.* 271). One of these forms was also recovered from the Lexden Tumulus (Fig 4.6), which was dated from *c* 15 to 10 BC (*CAR* 11, 88; Hawkes and Hull 1947, 60). However, the Sheepen assemblage as a whole as published by Hawkes and Hull point to an occupation period of *c* AD 5–61, during which time the ditch of Sheepen Dyke was used as

an open midden before being filled in after the Roman Conquest.

None of the remaining late Iron Age dykes has been convincingly dated. Philip Crummy has suggested a plausible development model, based on the limited archaeological evidence and the dyke morphology, starting with the laying-out of Heath Farm Dyke around Gosbecks *c* 25 BC. By *c* AD 5 Lexden Dyke had been added to complete the link between the two rivers and Sheepen Dyke had been constructed as an extra defence for the settlement and mint on Sheepen Hill. Over the next 40 years Kidman's, Oliver's and Gosbecks Dykes were added to reinforce Gosbecks. Shrub End Dyke was added to further defend Sheepen, linking with Kidman's Dyke at its southern end. Shrub End Dyke was also linked to the junction of Lexden Dyke and Heath Farm Dyke by the curious Prettygate Dyke (*CAR* 11, 176–7, figs 7.8–7.11). The outermost western dyke, Gryme's Dyke, is thought to have been added after the Conquest (*ibid*, 115).

A military role for these earthworks is suggested by the use of high ground, by the proximity of the dykes to each other and by the completeness of the barrier between the Colne and Roman rivers. In addition, the dykes continue over the two rivers, suggesting an intention to create flanking defences. A popular interpretation of the dykes' military function is that they were for controlling the movement of large numbers of chariots (Hawkes and Hull 1947, 15; *CAR* 11, 162; Black 1990, 142–3). The defensive utility of such large enclosed areas – not least the ease of escape from them – was noted by Julius Caesar (*Gallic War* Bk V, 21).

Some or all of the dykes may also have had roles as prestige symbols, territorial markers or stock enclosures. It is curious why so much manpower should have been expended on these structures if they were purely defensive, given that lesser barriers would have been equally effective in breaking chariot charges and that some of the dykes appear to cross slopes. There has been some discussion as to whether late Iron Age dyke building represented a new concept in defensive architecture, one perhaps continental in origin (Cunliffe 2010, 161), or the revival of an indigenous tradition of constructing linear barriers (Haselgrove 1989, 12; Davies 1996a, 75). Interestingly, at nearby Ardleigh two large linear boundaries of middle Bronze Age date mark out an area of flat land between two stream valleys, giving credence to an indigenous origin for dyke building in the Colchester area (Brown 1999, 177). It has been claimed that Bronze Age material has been recovered from the make-up of a dyke at Colchester, but there is no surviving evidence and the assertion remains suspect (Davies 1968, 1).

Settlement – Sheepen

Despite the obvious importance and prestige of Camulodunon the evidence recovered for actual occupation sites is limited. Even at the focal points of the settlement, such as Gosbecks, occupation seems to have been relatively dispersed and low-level. Elsewhere, domestic pottery from pits and ditches located inside and outside the dyke system point to dispersed settlement across the gravel terrace, although the evidence is fragmentary.

To date, only Sheepen has produced evidence of settlement density within the dyke system. Sheepen Hill, or 'Hilly Fields', is a gently sloping promontory which is separated from the later Roman town to the east by a small valley and delimited to the south by a stream course and to the north by the river Colne. The settlement was significant enough to warrant its own defensive dyke (MON400), Sheepen Dyke, which runs over the crest of the hill, linking the Colne and the stream (cover illustration and Fig 4.9). Spring lines on the hill would have provided fresh water and the river was navigable and fordable nearby. A number of late Iron Age 'occupation areas' measuring between 2.5m and 6m across were

identified during the 1930s excavations. Only eight of these were identified as securely pre-Roman, with a further 12 likely to be of similar date (Hawkes and Hull 1947, 46 and 47, note 2). There is some need for caution when interpreting the Sheepen evidence as it is possible that the excavation techniques used in the 1930s may have missed more ephemeral features (*CAR* 11, 163–4). Finds of Iron Age pottery from a watching brief at the Colchester Institute car park suggest that the Sheepen settlement extended to the south (FND294) (Crossan 2000b), although evaluation trenching undertaken east of the Institute produced only residual Roman material and no identifiable late Iron Age pottery, thus providing an eastern limit to the site (CAT Archive Report 11/96a).

The dating of the late Iron Age occupation at Sheepen has been the subject of some debate, with *c* AD 5, rather than *c* AD 10 now proposed as the start date of occupation there (Haselgrove 1987b, 485; Sealey 1985, 109–11). The situation is confused by the presence of a number of Dressel 1 *amphorae* on the site, which are known to have gone out of use in *c* 10 BC. The accepted explanation for the *amphorae* is that the containers were being reused (Sealey 1985, 101–8). Consequently the occupation at Sheepen is thought to have developed from the early 1st century AD, flourishing in, but not necessarily beginning in, the reign of Cunobelin. The 2007–09 excavations at the Colchester Institute in Sheepen produced at least eleven Dressel 1 *amphorae* plus Gallo-Belgic ware which is earlier than anything hitherto discovered at Sheepen, as early as the inception of the industry *c* 15–10 BC. Evidently activity at Sheepen began at different times at different places, and the publication of this important excavation can be expected to resolve the question of the start date of Sheepen once and for all (P Sealey, pers comm).

The buildings at Sheepen were circular or sub-rectangular and of simple construction, some with a central hearth and clusters of external rubbish pits. The living surfaces were of trampled clay, either located directly on the topsoil or dug into it, creating a sunken floor. Excavated turfs were used to form a shallow base wall for the superstructure and the walls themselves were of wattle and daub supported by either shallow-bedded lean-to poles or slender vertical stakes driven through the turf base. The rudimentary character of the huts at Sheepen is quite different from the developed roundhouses of the Essex Iron Age (Rodwell 1978a, 38 *pace* Dunnett 1975, 26). This building type has not been reported from elsewhere in Essex and remains an unexplained anomaly in the prehistoric architectural traditions of the county, being curious both for its small size and for the absence of internal bedding posts and external drip gullies. The diameter of the larger huts – roughly 6m – can be contrasted with late Iron Age huts with an average diameter of 13m at Little Waltham, near Chelmsford (Drury 1978, 123, fig 69), although huts of comparable size are known from other Essex sites, such as Chelmsford. In the late 1970s it was suggested that roundhouse forms died out in Essex at the turn of the millennium, being replaced with shallow-bedded rectangular forms that left little trace (Drury and Rodwell 1980, 70). Subsequent excavations have, however, demonstrated that roundhouse forms were not only present in the 1st-century landscape – for example, at Kelvedon in Essex – but survived through to the late Roman period, as, for example, at Stansted (P Sealey, pers comm).

Sheepen's buildings were mostly found spread out in an unplanned fashion on either side of a trackway (MON427) that entered the dyke midway down Sheepen Hill and ran south-west–north-east through the settlement, down towards the river Colne. Although there was some variation, the structures were of modest size and showed no clear indications of social hierarchy. A possible exception was hut D1, located on the site of the present-day Colchester Institute, which had apparently been burnt soon after the Roman Conquest (ELM 1258). The facts that burning had not been common across the settlement and that

nearby rubbish pits contained a large amount of high-quality Roman pottery, led the excavators to suggest that a high-status individual had lived here and had been singled out for rough treatment. This occupation site may have been the focus for the trackway and was curious for the presence of distinctly rectangular clay-lined pits in its vicinity (Hawkes and Hull 1947, 99–101).

Another structure of interest was found at site Y1 (Fig 4.9), to the south of a fork in Sheepen Dyke; this was a large sub-rectangular enclosure measuring 37m by at least 10m (Hawkes and Hull 1947, 118). Parallel bedding trenches for sleeper beams were identified, which must have supported some form of wooden superstructure, but no clear ground plan was recovered and no trace of a floor was noted. Native domestic pottery was recovered, but there were no other clues as to the building's function. A loose parallel can be drawn with long rectangular structures recorded at Manching (Bavaria), which have been interpreted as warehouses or barns (Collis 1984, 109). A closer parallel can be found with both structure 3 (Rodwell 1988, 15–21) and perhaps building 2 (Eddy and Turner 1982, 9, fig 5) at Kelvedon (Essex). The comparatively small number of such structures recorded could be due to the use of sleeper beams, the traces of which are susceptible to plough damage (Sealey 1996, 60).

Other features of the settlement area at Sheepen include a small number of timber-lined storage pits, possibly linked with industrial activity, a timber-lined 'water hole' (Hawkes and Hull 1947, 48), which has a parallel at Foxholes Farm (Herts) (Partridge 1989, 31–3), and evidence for a mint or mints (MON 428). Groups of coin flans were found in some quantity near pit K1 at Sheepen (Hawkes and Hull 1947, 129) and 200m to the south at Kiln Road (*CAR* 11, 131), suggesting at least two separate minting sites (Figs 4.2, 4.9). The Sheepen and Kiln Road excavations also encountered shallow scoop-shaped features sometimes described as 'working hollows' (ibid, 137). These have been recorded at a number of sites around the country and are thought to be linked either to domestic activities such as threshing or perhaps small-scale quarrying (Bradley 1978a, 43–4).

In 1970 Sheepen Hill was partially re-excavated, the trackway (MON 427) was re-examined and a further four late Iron Age domestic rubbish pits uncovered. However, no new pre-Roman occupation structures were found. A rectangular post-built feature was initially interpreted as a late Iron Age hut (Dunnett 1975, 26) but is now considered to be a Roman cellar (MON 685; Niblett 1985, 5).

Other settlement evidence

At Gosbecks the extensive field system no doubt encompassed dispersed occupation sites, but as yet no hut structures have been excavated. In 1948, a late Iron Age hearth along with domestic rubbish was noted 100m from the large trapezoidal enclosure (Hull 1958, 259). The enclosure is located on a gently sloping south-facing field close to a shallow valley with a spring to the north-west, and is assumed to be a royal farmstead; the internal features, discernable as cropmarks, include what appears to be a hut circle of only modest size (Fig 4.8; *CAR* 11, fig 5.2). A geophysical survey in 2001 identified further pitting in the southern half of the enclosure and it is possible that traces of larger structures have been denuded by ploughing (P Cott, pers comm). It was evidently remodelled several times, with later ditches being far more rectilinear, suggesting continuity of occupation into the early Roman period. A section in 1949 across the enclosure ditch suggested a pre-Conquest construction, with the ditch remaining open long enough for Roman wares to get into the fill (CMR 1948–50, 134; Hull 1958, 270–1).

Away from Sheepen and Gosbecks, probable settlement sites include 'The Lindens'

(Lexden Road), where rubbish pits contained pottery dated to *c* AD 30–50 (*CAR* 11, 131; Crossan 2000a); Gryme's Dyke south of Dugard Avenue, where a series of shallow features contained a number of native pottery forms rare at Sheepen and likely to be of the first quarter of the 1st century AD (*CAR* 11, 109–16); Colchester Fire Station, where finds of pottery from AD 5–60 were made (COLEM:1943.178); Kirkee McMunn Barracks, where two ditches contained Sheepen-type pottery of probable pre-Conquest date (Shimmin 1998b); and Margaret Road–Catchpool Road, where finds of native and Roman pottery, including *Cam.* 133, a pre-Conquest flagon found only at Sheepen, were made (Hull 1956). Elsewhere, A F Hall explored an 'extensive settlement site' east of Friday Wood, near Berechurch Dyke, which produced late Iron Age pottery (*CAR* 11, 26). As yet, conclusive evidence for late Iron Age settlement on the site of the later *colonia* has not been forthcoming, although David Clarke noted 'Belgic' pits at the NCP Car Park excavation at North Hill (Clarke 1971, 65).

Elsewhere, it is generally difficult to distinguish between pre- and post-Conquest occupation because late Iron Age grog-tempered pottery continued in use into the Flavian period. Sites where occupation could be pre-Conquest in origin include: Gosbecks Site B, where a large field ditch contained large quantities of broken domestic pottery (CAT Report 7/94b, 10); the Northern Approach Road near Turner Village, where significant quantities of pottery were found in two ditches and a pit (Benfield 1997a); Stanwell Street, which produced a large quantity of native and Roman pottery (COLEM:1937.987); Crouch Street, again with native and Roman pottery (COLEM:1938–16–21); Acland Avenue, where more than 100 fragments of native and Roman wares were recorded (unpub. report, Colchester Museums archives); Winsley's House on High Street, also with native and Roman pottery (CMR 1954–6, 18–19); and the Glebe Field, where native and Roman pottery were found in a street drain (COLEM:1938.14).

Manufacturing and trade

The excavations at Sheepen in the 1930s showed that from the beginning the community that lived there imported *amphorae* and tableware from the Roman world in quantity. In fact the presence of Dressel 1 *amphorae* in some numbers show that Italian wine was reaching elsewhere in Camulodunon in the 1st century BC (reaching Sheepen as empty vessels in secondary use). These earlier imports are most graphically documented by the *c* 15–10 BC Lexden Tumulus with its minimum of eleven Dressel 2–4 *amphorae* and minimum of six Dressel 1 *amphorae* (Foster 1986, 128–31). The *amphorae* reaching Iron Age Sheepen itself included wine jars of form Dressel 2–4, as well as fish sauce *amphorae* from the province of Baetica in southern Spain, and Haltern 70 *amphorae* which would have contained grape syrups and preserved olives. The quantity of imported tableware was prodigious. It included Arretine, Gallo-Belgic ware and central Gaulish wares. Samian ware from Gaul was conspicuous for its absence. Vessel glass also reached Iron Age Sheepen but in only modest quantities.

Hundreds of fragments of clay coin moulds (Fig 4.2) were recovered from the top of Sheepen Hill in the 1930s along with fragments of crucibles, bronze, iron and slag (Hawkes and Hull 1947, 129–33, 345). Coin moulds were also found during the 1971 excavation and the 1972 watching brief at Kiln Road (Fig 4.9; *CAR* 11, 131–7). No complete moulds were recovered, but they appear to have comprised 50 circular holes, arranged in seven rows of seven with the fiftieth in the centre of one side. The moulds would have been used to make blanks, which would then be struck, and the number of holes has been suggested as evidence of a decimal system (Goodburn 1989, 87). A sealed hoard of 10 coins of

Cunobelin from Sheepen gives further weight to this theory (Hawkes and Hull 1947, 87). The die imprints on Cunobelin's coins are, like other Celtic coins, generally slightly off-centre or oversized so as not to fit on the blank in a symmetrical fashion and opinion varies as to whether this was a stylistic choice or a casual attitude to coin production (Creighton 2000, 36–7). Recently, it has been noted that the last series of Cunobelin's coins have a symmetry between the obverse and reverse sides which suggests the use of a hinged die. Here the use of imported Roman technology appears to demonstrate the increasing influence of the Roman world on Camulodunon (Megan Davies, pers comm).

A total of 130 bronze and silver Celtic coins were recovered from the 1930s excavations; the majority of these were coins of Cunobelin, with Gaulish links indicated by coins of the Ambiani and other unidentified Gaulish types. Curiously, gold coins of Cunobelin are virtually absent at Sheepen, but finds of bronze coins are concentrated there, suggesting that such coins were specifically for local market use (Collis 1984, 158). One coin of Cunobelin recovered from the river Colne at Sheepen by a metal detectorist in 1980, depicts a high-sided ship with one tall mast, a flat keel and a steering oar, perhaps a representation of Cunobelin's own trading fleet (Fig 4.5; McGrail 1990, 43–4). A similar coin has been recovered at Canterbury (Muckleroy *et al* 1978). This impression of maritime trade is supported by the discovery of Latin alphabet graffiti on sherds of Arretine ware from a secure pre-Conquest horizon at Sheepen. This suggests that literate individuals – perhaps traders from Gaul – were present at the site (Hawkes and Hull 1947, 284–5).

Aside from coin production, the evidence for native industry at Sheepen is sparse and the majority of crucibles found belong to the post-Conquest period (Hawkes and Hull 1947, 345). There is no direct evidence of metalworking, only the presence of native metalwork products such as a large number of La Tène III 'Colchester-type' brooches and a firedog with an ox-head terminal (Hawkes and Hull 1947, 309, 329–31 and 341). Elsewhere at Camulodunon, industrial slag, associated with a concentration of domestic late Iron Age–early Roman pottery, recorded near Gosbecks suggests localised metalworking amongst the dispersed farmsteads (Brooks *et al* 1995, 261). Hull also suggests metalworking activity at Gosbecks in the pre-Boudican period, based on his observation of patches of slag near the Roman theatre, although this may be post-Conquest material (Hull 1958, 260). A kilometre to the south of Camulodunon, a pre-Conquest 1st century AD crucible for copper-alloy working was found at Layer de la Haye (note in Essex Archaeol Hist 15 (1984): 134).

Despite the quantities of native pottery recovered at Sheepen, we have no direct evidence of its production on site in the late Iron Age. What Hawkes and Hull proposed as a waster is not now available for study (Hawkes and Hull 1947, 261). It might have been vessel which had been exposed to high temperature after breakage. Native production techniques were less advanced than were continental industries and late Iron Age kilns would have taken the form of insubstantial clamps or bonfires that have left little or no trace (Swan 1984, 53–5; Woods 1974).



Fig 4.5 A reconstruction painting of a late Iron Age ship based on a design found on a coin of Cunobelin (Frank Gardiner).

Claims that finds of briquetage (fired clay salt production apparatus) at Sheepen indicate salt production there are misconceived (Hawkes and Hull 1947 48, 346–7; Niblett 1985, 23, fig 34, no 30). The briquetage, from late Iron Age and also early Roman contexts, all came from sites near the river. However it is unlikely that attempts would have been made to extract salt from a freshwater river even if it were tidal (because of the dilution of the brine). What we have at Sheepen is the phenomenon of an inland find of briquetage. There is no consensus as to how this should be explained and the issue remains contentious (Barford 2000, 276–8; Crummy 2007, 376–7; Sealey 1995, 68–9).

Agriculture and the field system

Pollen analysis from middle and late Iron Age contexts at Stanway suggests an evolution from pasture to cereal cropping, perhaps reflecting population growth in the vicinity. In the middle Iron Age the area of the modern quarry was a herb-rich grassland: perhaps pasture with knapweed, daisies, dandelions, mugwort, stinging nettles, heather and bracken. Oak and hawthorn were present but it was evident that the landscape was cleared of trees. The late Iron Age samples showed that oak and birch were present in small numbers and were accompanied by bracken, poppies, corn spurrey, buttercup and mugwort, but the presence of cereal pollen could indicate that the herbs were now weeds in a cornfield (Wiltshire 1999, 15). Six samples of charred plant remains from late Iron Age/early Roman features excavated at Gosbecks Site B revealed low densities of cereal grains and chaff with charred seeds of weeds, grassland and wetland plants, and hazelnut shell. The material appeared to derive from nearby domestic activity (Fryer and Murphy 1996). The evidence implies a well-populated countryside cleared of trees and dominated by arable and pasture, similar to that recorded at other comparable settlements, such as Verulamium (Dimbleby 1978, 112–15).



Fig 4.6 The Lexden Tumulus was arguably subject to one of the first scientific excavations in Colchester and certainly demonstrated the significance of the area for the study of late Iron Age Britain (Philip J Wise).

At Camulodunon the geology of the settlement is predominantly that of a gravel terrace with London clay in the river valleys on either side and to the south around Abberton and Langenhoe. The fertile, but heavy, clay soils south of the Roman River have not preserved distinct cropmarks, whereas the lighter coarse loamy soils of the gravel terrace have revealed numerous field systems. From a synthesis of aerial photographic evidence it is possible to identify an extensive network of sub-rectangular fields arranged around more sinuous and curvilinear trackways, droveways and dykes. The system is centred on the late Iron Age farmstead enclosure at Gosbecks and extends eastwards towards Colchester Cemetery (Fig 4.8). Two comprehensive syntheses of cropmarks have been produced (*CAR* 11, fig 6.1; RCHME, NMP TL 92SE). The basic pattern comprises small sub-rectangular agricultural fields and stock enclosures located close to the known occupation areas, with boundary ditches delimiting this zone from perhaps open pasture-lands around the periphery. The system extends for about 3km westwards and covers approximately 650ha on the northern edge of the Roman River valley.

South-west of the Gosbecks farmstead there is a co-axial system orientated NNW–SSE, which comprises fields and enclosures of various sizes. The network is reasonably coherent, although modified over time. Interestingly, a number of boundaries appear to run under Heath Farm Dyke South, suggesting that the complex is essentially late Iron Age or earlier in origin. East of the farmstead and the later Roman theatre site there are two field-boundary orientations: one orientated north-east–south-west and based around the later Colchester–Gosbecks Roman road; and another, more radial in pattern, emanating from the direction of Oliver’s Orchard, which must pre-date the Roman road. The sinuous trackways that lie to the west of the main enclosure at Gosbecks appear to cut and therefore post-date the boundaries that run under Heath Farm Dyke South; in addition, part of the track system appears to respect the Roman fort to the north. To the east of the main complex at Gosbecks, undated funnel-ended trackways are designed to move stock onto the plateau at Kingsland Farm and along a curving trackway that arcs north-eastwards from above Birch Grove towards Barnhall, where burials suggest late Iron Age occupation nearby.

Field ditches containing late Iron Age–early Roman pottery have been excavated at

several sites within and just outside the *oppidum*. Generally, finds are insufficient to provide more than a broad late Iron Age–early Roman date range, as at, for example, an area in the north-west of Gosbecks Archaeological Park (Benfield 1998b), the Northern Approach Road (encompassing an area west of Turner Road, Turner Village and Colchester General Hospital) (CAT Report 1997/6) and Kirkee McMunn Barracks (Shimmin 1998b). However, the curvilinear shape of a series of late Iron Age ditches that were excavated south of Dugard Avenue in 1973–6 suggested that they were parts of stock enclosures (Figs 3.2, 4.8). Two of the ditches formed a triangular enclosure against Kidman's Dyke, the enclosure ditch measuring up to 5.5m wide (CAR 11, 116). A similar triangular enclosure abutting the probably Roman Gryme's Dyke was sectioned at Chitts Hill and comprised an undated linear ditch 1.25m deep and 2.7m wide (Fig 3.2; Petchey 1979). Further west, at Church Lane, Stanway, a pair of parallel ditches, probably a droveway leading to a nearby enclosure, were sectioned in 1991. The dating evidence was poor, although possible early Iron Age pottery was recovered from the droveway ditch and middle Iron Age pottery from the enclosure ditch. Interestingly, a sherd of Roman *amphora* and an Anglo-Saxon sherd were recovered from the droveway ditch, raising the possibility of long-term landscape continuity in this area (Partridge 1993a, 218). South of Bellhouse Farm, Stanway, two ditches were sectioned in 1999 in anticipation of mineral extraction: one was shallow (0.4m deep) and broadly Roman in date, the other larger (3.2m wide and 1.1m deep) and dated late Iron Age to 3rd–4th century AD (Brooks 1999a, 11).

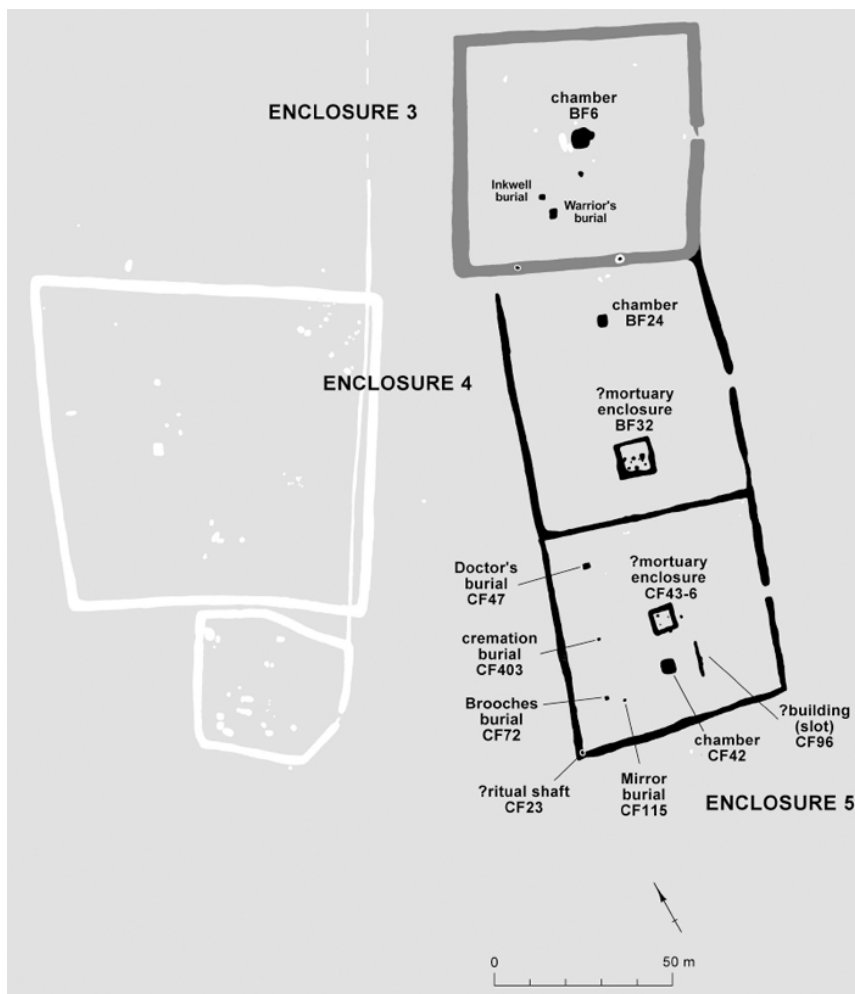


Fig 4.7 The burial site at Stanway, to the west of Colchester, is of international importance for the study of the funerary rituals of the late Iron Age elite (insert to Fig 3.2) (Colchester Archaeological Trust).

A number of enclosures have also been identified, including Stanway enclosures 2 and 3, which appear to have originated as stock or settlement enclosures, perhaps during the second half of the 1st century BC (Fig 4.7; Crummy 1992a, 2). To the south-west, at Abbotstone, the late Iron Age and Roman enclosures are situated around a small enclosure of middle Iron Age date (Benfield and Brooks 1999; P Crummy 2000, 4–5; Pooley and Benfield 2005). A rectangular enclosure (MON999) at Lexden Wood Golf Club has produced both middle Iron Age and Roman pottery and may yet prove to exhibit similar continuity (Brooks and Austin 2000; Orr 2002a).

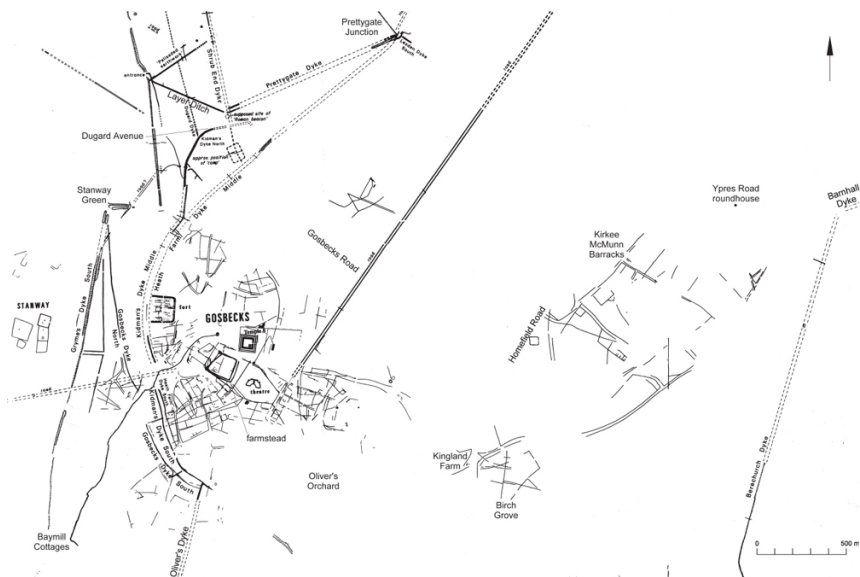


Fig 4.8 Cropmark features in the Gosbecks area (insert to Fig 3.2) (Colchester Archaeological Trust).

or more distinct flat cremation cemeteries located at St Clare Road (Lexden), Lexden Grange, Abbey Field and Colchester Cemetery. In addition, there is a handful of isolated burials. The more elaborate cremation burials generally consist of pedestal urns accompanied by grave goods placed in shallow pits, in the fashion of the tradition imported from Gaul and the Rhineland (Stead and Rigby 1989, 86). The earliest graves are dated by the appearance of Knotenfibel brooches known to have arrived from the continent *c* 50 BC at the earliest (Hattatt, 1987, 26). None of the Colchester burials are associated with enclosures, but the evidence is fragmentary in nature and the existence of perimeter ditches cannot thus be ruled out. All of the flat cremations cited have been recovered as stray finds and many have not been precisely dated: some could conceivably be early Roman in origin. Such is the extent of the later Roman burial zones that only a handful of burials fall outside them.

A definite group of late Iron Age burials (MON780) was recovered from St Clare Road during house building in the early 20th century. Twenty-seven vessels, derived from at least 10 graves, came from an area no more than 75m across (*CAR* 11, 164). The absence of Roman tableware forms, which arrive in Britain after 25 BC, and the presence of Knotenfibel brooches, indicate a date range of *c* 70–25 BC for the group. Just 100m south-east of this group an outlying burial may be represented by a deep pit containing charcoal and human cremated bone, possibly that of a child, excavated under the tail of Lexden Dyke. This has also been interpreted as a foundation deposit for the dyke (*ibid*, 42).

Five hundred metres to the north-east of St Clare Road, at Lexden Grange, five pedestal urn cremations have been recorded (MON1014) (CMR 1903–4, 17). The most impressive of these burials was discovered in 1904 and contained a bronze mirror, a coral-mounted bronze cup, a bronze pin and six pottery vessels, including a pedestal urn (Hawkes and Hull 1947, 13). The presence in the grave of mica-dusted tablewares from central Gaul suggests a date after 25 BC. Just to the west, and outside the Lexden dyke system, another pedestal urn was recovered from behind the old rectory in Lexden village (*ibid*, 13).

Two burial groups (MON1015) have been found in the vicinity of Abbey Field, south-east of the modern town: one of the groups included a fine redware jug datable to *c* AD 10–43 (COLEM:1905.851–2; COLEM:1905.963). Further east, at Colchester Cemetery, a row of four native burials (MON779) was found outside the west wall when the cemetery was extended in 1946 (Hull *nd b*, 571–4). In 1951, another late Iron Age burial was found somewhere in the cemetery: this time the grave group contained a terra rubra bowl, a white flagon and a pipeclay beaker with a herringbone ornament (*ibid*, 615).

Three further isolated cremations require a mention, all pedestal urns: one was found in a sand pit in Bourne Road (COLEM:1963.505); one near Winsley's Almshouses on Military Road (COLEM:1905.1001–3); and one was recovered during building work at the Colchester Institute (COLEM:1952.68). In addition, five pieces of 'Belgic' pottery, including an urn fragment, are listed in the accession register of the Colchester Royal Grammar School: the entries are dated 1923 and recorded as being from the school grounds. This material may have come from the excavations for the school baths, which took place in that year. Lastly, a mirror found at Hyderabad Barracks in 1974 may represent a further cremation burial (Sealey 1996, 61).

At Camulodunon the articulation of elite power through funerary ritual extended beyond the simple inclusion of rich grave goods. A higher tier of aristocratic burials is apparent from the early stages of the settlement's history. These burials, involving complex funerary rituals, funerary chambers, burial mounds and enclosures, are only paralleled in Britain at Folly Lane, St Albans (Niblett 1999). They appear to be related to a La Tène D

Gaulish tradition evident in the second quarter of the 1st century BC at Clemency (Metzler *et al* 1991) and Vieux-les-Asfeld (Lambot *et al* 1994, 208). The first site of this kind to be excavated at Colchester was the Lexden Tumulus in 1924 (Fig 4.6; MON682; Laver 1927). The barrow stood 2m high in 1924 and was originally 30m in diameter, and, while the initial excavation suggested an oval ditch around the barrow, no ditch was encountered when a section was put across the perimeter by Colchester Archaeological Trust in 1973 (CAR 11, 127–30). Jennifer Foster's subsequent re-evaluation of the site suggested that it comprised a barrow overlying one or possibly two rectangular funerary chambers dating to c 15–10 BC (Foster 1986). The chamber contained broken, but unburnt, sherds of Roman pottery, as well as cast copper-alloy figurines, chain mail, furniture and a Bronze Age axe. Small heaps of cremated bone were found at the base of the chamber and, amongst the luxury goods, a silver medallion of Augustus providing a *terminus post quem* for the burial of 17 BC.

At Stanway, to the east of Colchester, the identification of four rectilinear ditched enclosures and one sub-circular enclosure in cropmark form led to an excavation between 1987 and 1997 prior to gravel extraction (Fig 4.7). The enclosures have provided a remarkable insight into a complex high-status burial ritual which involved the burning of high-status goods on a pyre and their subsequent partial deposition in a wooden chamber. There is some evidence that the chambers were then covered with a turf mound. Enclosures 3, 5 and possibly 4 contained traces of turf that had collapsed into the funerary chambers (Crummy *et al* 2007, 104, 142 and 130).

The earliest sub-circular enclosure (2) was dated to the middle Iron Age and appears to be related to a domestic settlement located here. By the late 1st century BC a second enclosure (1), the largest of the complex, was added and used for a funerary ritual that involved the construction of a centrally placed wooden chamber (Chamber AF 25) containing cremated human bone along with a range of high-status possessions (Crummy *et al* 2007, 101–3; CAR 11, 170). Insufficient bone was recovered to suggest the presence of a human body and it may be that a token amount of cremated bone was thrown back into the chamber as part of the ritual (R Niblett, pers comm), although no trace of a pyre site survived in the enclosure. The chamber contained no imported Roman pottery and so appears to pre-date c 25 BC. The pottery from the satellite graves within the enclosure was exclusively 'Belgic' wheel-thrown, grog-tempered ware. Elsewhere in the complex a small cremation burial was discovered outside (the later) enclosure 5; this contained a Knotenfibel brooch which would suggest that it is also 1st century BC in date.

There appears to have been a hiatus of activity lasting from 50 to 75 years before the construction of the next enclosure (3). This contained a slightly off-centre funerary chamber larger than that of enclosure 1, although set within a smaller ditched enclosure. Enclosure 3 revealed traces of a pyre near to the funerary chamber and, unlike enclosure 1, had an east-facing entrance, perhaps orientated on the rising sun. The final two enclosures in the sequence appear to have been added after the Conquest and are dealt with in the Roman chapter (*see* page 94–6).

At Gosbecks Archaeological Park there is a further example of a massive, rectangular, ditched enclosure with an east-facing entrance, situated adjacent to the trapezoidal farmstead enclosure (Fig 4.8). Here the enclosure measures only 40m across, contrasting with the largest Stanway enclosure of 100m. However, the V-shaped ditch is far more monumental in scale, being 10m wide and 3.8m deep (Hull 1958, 270). Sections excavated across the ditch have failed to provide pre-Roman dating evidence, but given that the site became a focal point for a major Romano-British religious centre, it is possible that the

ditch was recut in the Roman period. The circumstantial evidence points to this being an important native shrine or royal mortuary enclosure, or both, comparable with the Folly Lane enclosure at Verlamion (Niblett 1999). Geophysical surveys of the site have revealed interesting internal features that may one day help to resolve this issue.

Also of interest is a rectilinear enclosure at Homefield Road, within the Colchester Garrison, which appears on aerial photographs. With an east-facing entrance and internal feature, it appears to be of identical typology to the Stanway and Gosbecks sites, and, curiously, sits on the same latitudinal axis. It currently lies neatly sealed beneath a car park and investigations in 2004/5 suggested that the enclosure may indeed be of middle Iron Age date (*CAR* 11, fig 6.1; Brooks 2005b).

Ten kilometres north-west of Colchester an important La Tène III burial was excavated at Mount Bures in 1852. Here a pit contained a series of grave goods including six *amphorae*, Gallo-Belgic pottery and two iron firedogs with bronze terminals (Smith 1852; Stead 1967, 53). The burial is similar to those found at Welwyn Garden City, but differs from the rich burials seen at Lexden, and possibly Stanway, in that it appears to involve neither the deliberate destruction of artefacts nor the construction of burial mounds. Further afield, at Kelvedon, some 16km south-west of Colchester, a rare warrior burial was discovered by chance in 1982. This comprised an iron sword, a bronze scabbard, an iron shield boss and spearhead, a tankard, an imported bronze bowl, some iron fittings and two Aylesford-Swarling urns. The burial is dated to *c.* 75–25 BC and is comparable to those found in the Arras Culture of Yorkshire (Sealey 2007).

The current state of knowledge

by Philip Crummy

The origin of Camulodunon is far from certain and much work remains to be done on the subject. At present, it is not possible to place the foundation of Camulodunon before *c.* 50 BC. The date derives from the early phase of the Lexden Cemetery (*CAR* 11, 164–9), the first occurrence of the name Camulodunon around 25–15 BC (ibid, 174), and a few sherds of pottery either sealed by or under the rampart of the Sheepen Dyke (ibid, 161–2). However, both the Stanway (Crummy 2001, 23–8, 66–70; Crummy *et al* 2007, 8–13, 435–43) and Abbotstone sites (Pooley and Benfield 2005) are of the late Iron Age with a middle Iron Age component, which suggests that Camulodunon may have originated significantly earlier than the mid-1st century BC.

It should not be assumed that the late Iron Age settlement was called Camulodunon from its beginning, since the name would only apply when it had defences and the first phase or phases of the settlement may have been undefended. Presumably the fortifications implied in the name are dykes, although it is possible that the enclosure ditch around the farmstead at Gosbecks was substantial enough to qualify (Fig 4.8).

A critical site for dating the foundation of Camulodunon is likely to be the farmstead enclosure at Gosbecks, which remains unexcavated apart from a section dug in 1949 across its enclosure ditch (*CAR* 11, 97–9), which is apparently about 2.5m deep and thus was more substantial than some of the dykes; the temporal relationship between the enclosure and the sequence of dykes remains to be determined, however. The most obvious conclusion is that the first phase of Iron Age occupation at Gosbecks is represented by a farmstead, the defences of which were later improved by the addition of dykes. However, such a sequence would need to be tested by excavation and, moreover, as an additional complication, it cannot be assumed that the large enclosure ditch pre-dates the first of the dykes, since it

may be a later recut of an earlier, shallower, non-defensive version.

The dykes are as yet poorly dated, only two having sound *termini post quem*: c 50 BC for Sheepen Dyke (Fig 4.9, *CAR* 11, 83, 161–2), which is not particularly useful, and c AD 47 for Gryme's Dyke (Fig 3.2; *ibid*, 115). C F C Hawkes reassessed the start date for both the Sheepen site and the Sheepen Dyke as being c 5 BC (*ibid*, 83). Stratigraphic relationships between Heath Farm Dyke and Lexden Dyke are known, because they intersect and the intersection has been excavated. Otherwise the others have been dated approximately by sequencing them horizontally in relation to the dated dykes. The result is that the phasing of the dykes is problematic and uncertain, and can only be guessed at (*ibid*, 175, fig 7.7).

The full extent of the dyke system is also not fully understood. Some dykes may extend further than mapped at present, there might be a few others which await discovery, and the status of some so-called dykes, such as Dugard Dyke, is questionable. The dykes to the north of the river Colne and south of the Roman River are especially problematic in terms of their full extent and purpose. It remains to be seen whether they were associated with nearby occupation or intended as outliers of the main defences. The large earthwork at Haynes Green, to the south-west of Colchester, is undated; although 7km from the dykes at Gosbecks, it could be an outlier positioned across open ground. Collectively, these earthworks suggest that the *oppidum* had no precisely defined boundaries and that it was protected by a system of outworks which was set in woodland.

The function of the dykes is still questioned occasionally, but the fact that all the dykes faced outwards suggests that they were defensive structures rather than land boundaries, traversing open tracts of land to act as cross-country obstacles rather than forming defended enclosures such as hillforts. Thus their defensive capabilities depended on integration with rivers, valleys, woodland and marshes.

C F C Hawkes preferred to see the development of the dykes and the Sheepen and Gosbecks sites as expressions of dynastic change and a struggle between the Catuvellauni and the Trinovantes. His last review of this subject (*CAR* 11, 88–94) is a masterpiece in which, building on earlier work by himself and others, he sets political and topographical developments in Camulodunon against a wider background constructed from evidence in Classical texts and on Roman and Iron Age coins. However, given how little we know about kingships and the way tribes interrelated, such constructions are inevitably very subjective (*ibid*, 172–3).

The probability is that the ramparts were of simple dump construction. However, it has not yet been possible to investigate sufficiently long lengths to determine their structure adequately, and it cannot be assumed that all the dykes were built in the same way, or indeed that each dyke was of the same construction along its whole length. C F C Hawkes's excavation of the Lexden Dyke in 1932 illustrates the problem. Turves and a large single posthole were found at the front of the rampart of the Lexden Dyke (*ibid*, 35–7), but interpretation was difficult because of the limited size of the area which could be uncovered. The rampart might have had a timber and turf revetment or, possibly, a turf revetment and a timber structure such as a tower.

It is not certain to what extent the entrances through the dykes were protected by timber gates. The remains of one may have been found in Gryme's Dyke (*ibid*, 28), and C F C Hawkes, on the basis of slender evidence, thought there may have been another at the entrance in the Lexden Dyke which he dug in 1932 (*ibid*, 43–4). Too little is known about any of the dykes to determine whether palisades were used either on top of the ramparts or beside them.

Cropmarks, especially at Gosbecks, have enabled the probable nature of the pre-Roman

occupation over most of the *oppidum* to be characterised (Figs 3.2, 4.8). It took the form of scattered settlement associated with groups of small enclosures (presumably mainly paddocks and cultivated fields) interspersed with larger areas of woodland and communal grazing, including river meadows. An extensive system of unmetalled ditched droveways enabled the movement of animals and people within the *oppidum*. Burials and burial areas appear to have been highly localised and situated on the edges of fields and other marginal land close to where the dead had lived.

Occupation must have existed over most of the area to varying degrees of density. The two major centres of activity – Gosbecks and Sheepen – have been mapped in detail and phased to an extent, but little is known about the general layout within the area protected by the dykes and how the inhabitants of Camulodunon would have moved about within it (Figs 4.8, 4.9). Elements of the system of trackways which linked the various parts of the settlement can be deduced from cropmarks, but our understanding of the overall internal layout of the *oppidum* is still very patchy and incomplete. Large areas inside the *oppidum* are likely to have been woodland. At present, it is possible to guess their likely extent from the following indicators: 1) the locations of ends of dykes which stop for no apparent reason (Heath Farm Dyke, Sheepen Dyke, Oliver's Dyke, Barnhall Dyke and Abberton Dyke); 2) the location of the Romano-Celtic temple dedicated to Silvanus, god of woodland (Hull 1958, 236–40); 3) areas which appear to be free of cropmarks; 4) areas which appear to be free of late Iron Age occupation (in other words the area later occupied by the walled Roman city); and 5) areas where trackways stop (for an example, see Benfield 2008a, junction of CF16 and BF32/33).

Funerary remains have been found scattered widely throughout the *oppidum*. The richest is the Lexden Tumulus, now dated to c 15–10 BC and thought to be a chambered grave (Fig 4.6; Foster 1986; *CAR* 11, 89). Stanway proved to be an important funerary site extending from around the middle of the 1st century BC to AD 60 (Fig 4.7; Crummy *et al* 2007). Four rectilinear enclosures each contained a single wooden chamber and, in three cases, a few secondary graves. A fifth enclosure formed the core of a middle Iron Age farmstead, similar to the one at Gosbecks but significantly smaller. There are also flat cemeteries: 27 pots representing at least 10 graves were recovered over a number of years from various building operations around the south end of St Clare Road, not far from the Lexden Tumulus. The group as a whole is datable to c 50–10 BC, and provides the clearest evidence for occupation in Camulodunon before the Lexden Tumulus. Another, less well-known, group constitutes the Barnhall cemetery which, from the limited information about it (*CAR* 11, 170), may prove to be as early as the Lexden Cemetery.

The distribution of known burials provides some clues about the distribution and density of occupation within the *oppidum*. For example, the burials around Barnhall (*CAR* 11, 170) may point to an as yet unrecognised area of settlement in the vicinity. There is as yet no clear settlement focus for the Lexden Tumulus and the nearby early phase of the Lexden Cemetery (*ibid*, 164–9). However, these burials were located close to the main route out of the west side of the *oppidum*, and the relationship between the tumulus and the road is reminiscent of the Roman practice of erecting funerary monuments alongside major approach roads, making it possible that the need for public visibility is the explanation behind its location. The Lexden Mount is a very pertinent later parallel.

Craft specialisation within areas of occupation is widely regarded as being a characteristic of *oppida* and an indicator of urbanism. Within Camulodunon, such specialisation is certainly evident near the river Colne at Sheepen, where manufacturing activities seem to have dominated in the late Iron Age and the early Roman periods (Fig

4.9; Hawkes and Hull 1947; Niblett 1985). These activities included metalworking, coin-blank production, enamelling, and pottery- and glass-making. The industrial activities provide a contrast to the large defended farmstead which must have dominated pre-Roman Gosbecks. However, the apparent functional distinction may not be that clear-cut, because a kiln has been recorded at Gosbecks (Hull 1958, 270), and there is also evidence for metalworking in the surrounding area (ibid, 260), although this may be evidence for short-lived production related to the construction of major structures.

Preservation

The dykes are poorly preserved; at least one (Sheepen) was levelled in antiquity and there may have been others that were similarly treated, at least for part of their course. Less than a quarter of all the dykes now survive as earthworks, and practically all of those have been damaged to varying degrees by building or farming operations, erosion and the uprooting of trees. About two-thirds of the *oppidum* between the river Colne and the Roman River has been built over. The rest of this area is taken up in equal proportions by park/grassland, cultivated farmland and woodland. The cultivated farmland has been badly damaged by deep ploughing and, as a consequence, little horizontal stratigraphy survives and cut features have been truncated. Damage seems to have been at its worst in the 1940s, as many horses were being replaced by tractors in agriculture. The effects at Gosbecks can be seen in the archaeological record and the exposure of various dark patches in the freshly ploughed soil which sparked off the explorations in the late 1940s and early 1950s by M R Hull and the Roman Essex Society (Hull 1958, 259–71). The degree to which cultivation continues to damage sites is hard to gauge, although the situation is now relatively stable, with the worst of the damage having been done. Farmland which was built over before World War II is possibly better preserved because it was not deep-ploughed, although in many places building works and subsequent gardening may have been just as harmful. Because it has never been deep-ploughed and consequently still retains horizontal stratigraphy, the Sheepen site is still probably one of the best-preserved areas, despite a large part of the site being destroyed in 1971 to create a playing field; this level of preservation must in part explain why the excavations of the 1930s and in 1970 were so prolific.

Importance

Camulodunon is the largest and most complicated of the late Iron Age *oppida* in Britain. Its complexity provides opportunities for the study of the development and function of dykes in a British *oppidum* and for exploring the spatial zoning of different activities as indicators of urbanism. The *oppidum* is also important as an exceptional example of a high-status settlement site of the late Iron Age which was occupied by kings. It is one of just a few places which, through inscribed coins and Classical texts, can be related to various political developments in late Iron Age and early Roman Britain. Several of its burials are rich and of high status, especially the Lexden Tumulus and those at Stanway. They are important for what they reveal about the funerary practice of the richest and most powerful elements of British society at that time. The burials are also of considerable interest because of their continental parallels and the bearing that these are likely to have on our understanding of the evolution of the tribes and the subsequent *civitates* of Britain. Camulodunon is a key site for the study of late Iron Age artefacts of various types, especially pottery and brooches, because of the quantity and diversity of the objects and the high proportion of imports among them.

Potential for future research

Our knowledge of the full extent of the dyke system could be improved by excavation and geophysical surveys. The outlying dykes in particular need to be traced to clarify the relationship between the *oppidum* and the wider landscape. The developmental sequence of the settlement could be made clear by the excavation of dykes, especially where they intersect. The foundation date of Camulodunon can probably be determined by excavating the large farmstead at Gosbecks. The start date for Sheepen (*CAR* 11, 77; Haselgrove 1987a, 163–71; Haselgrove 1987b) is another issue that might be resolved by further excavation. The excavation of long lengths of well-preserved sections of rampart offers a way of determining how some of the dykes were built, and whether or not they incorporated palisades. Similar investigations of entrances in dykes should show whether or not they included timber gates, and if so, what they were like.

Large areas of the *oppidum* remain uninvestigated and it could be that other major centres of occupation, which approach Gosbecks and Sheepen in scale, await discovery. The Barnhall cemetery may point to such an area in the vicinity of Berechurch Dyke. The distribution of burials may be helpful in clarifying the pattern of occupation within the *oppidum*, since there are indications that many of them lay at or near the places the dead had lived. Areas could be identified where there was little or no occupation (woodland, pasture and meadow) and more information could be recovered to help define more clearly the extent to which activities in the *oppidum* were zoned. The network of droveways could probably be largely reconstructed, given enough excavation. The landing area at Sheepen remains unexplored, and there may be other landing places further downstream which await discovery. Unfortunately, structural evidence for roundhouses survives very poorly at Camulodunon and those found at Sheepen (Hawkes and Hull 1947, 46–8) seem to be at variance with the sorts of buildings recorded elsewhere in the region. It is therefore important that more houses are excavated to determine what was typical in the late Iron Age settlement. Much of the evidence for buildings has been destroyed by deep ploughing, and the best prospects of finding examples are offered by areas which were built over before World War II.

5 The Roman legionary fortress, AD 43–49

by *Adrian Gascoyne*

Introduction and historical framework

Roman emperors had considered annexing Britain since Caesar's expeditions in 55/54 BC, but it was not until the shaky succession of Claudius in AD 41 that one emerged with enough personal motivation to concentrate his energies on the task. The context for the invasion was provided by the political instability in Britain following the death of the British leader Cunobelin and the subsequent territorial expansion of the Catuvellauni under his two sons Togodumnus and Caratacus. The resulting internecine conflict left a significant part of south-east Britain in the control of anti-Roman forces and adversely affected the balance of power on the empire's north-west frontier, in an area which it had long since viewed as being legitimately within its sphere of influence. A political pretext for invasion was provided by a plea for Roman intervention from the deposed pro-Roman king, Verica of the Atrebates, and a political imperative was provided by Claudius's need for a military conquest to establish his reign.

The invasion in AD 43 was mounted by four legions accompanied by auxiliary units under the general command of Aulus Plautius. By the end of the first season of the military campaign, initial British resistance was broken, and the primary objective, Camulodunon, had fallen. Claudius made political capital by leading the final military advance into Camulodunon and receiving the submission of a number of British tribes here (*Dio Cassius*, bk LX, 60.20–1). At this point the main body of the invasion force was probably at Camulodunon, although parts of the army might already have been garrisoned in the south-east, and Legio II Augusta had probably begun its drive towards the south-west under Vespasian (Dudley and Webster 1965, 89–90; Salway 1993, 69). It is likely that a large, but temporary, camp was established at Camulodunon to accommodate the army until the completion of a new legionary fortress and redeployment of troops in the following year.

As the invasion proceeded, diplomatic arrangements would have served to reduce the occupying army's policing role; levels of local cooperation were probably a major factor in determining the specific requirement for a military presence in each of the conquered tribal territories. For this reason, it has been suggested that an apparent absence of forts within some areas of southern England may be a genuine one (Eddy and Turner 1982, 22–5; Eddy 1995). It is also likely that variations in the distribution and form of military establishments, from fortlet to the much debated vexillation fortress, relate to differing native responses to the invasion (Millet 1990, 46).

Despite the relative abundance of early military activity at Colchester there are few other military sites known from Trinovantian Essex, although the existence of a Claudian supply base can be inferred from finds recovered at Fingringhoe Wick (Wickenden 1996, 77). In Kent the only confirmed site of the early invasion period is the bridgehead enclosure and later supply base at Richborough, while in Sussex, within the territory associated with the client king Cogidubnus, a supply base at Fishbourne probably supported Vespasian's thrust into the south-west (Cunliffe 1971, 13–14). It was there, in the territories of the Durotriges and other tribal groups, that the army encountered difficulties, with the resistance recorded by Suetonius (*Vespasian* 4) reflected in the archaeological record (Webster 1970, 181).

While Legio II Augusta campaigned in the south-west, elements of the army were rapidly penetrating the heartlands of southern England, among other things establishing a vexillation fortress at Alchester in late AD 44 (Oxon) (Sauer 2001, 191). Meanwhile, Legio XX was busy constructing Britain's first legionary fortress at Camulodunon, which was to be occupied for some five or six years until the conquest of Britain received a fresh impetus under the governorship of Ostorius Scapula and the advancing frontier demanded that Legio XX be relocated to Kingsholm, Gloucester (Hurst, 1985).

Past work

The presence of a legionary fortress at Colchester was suspected for many years (Hassall 2000, 52) before large-scale excavations during the 1970s and 1980s confirmed its existence. Antiquarian suspicions were aroused by Tacitus's reference to the foundation of a *colonia* at Colchester and the implication that one reason for this act was to redeploy a legion to fight against the Silures (Tacitus, *Annals* 12.32). The first survey of Colchester's dyke system by Lufkin and Smith in 1722 resulted in the identification of Prettygate Dyke as part of a 'Roman camp' (Fig 3.2; Morant 1768, bk II, 133). However, it was not until the 19th century that the discovery of two military tombstones alongside the main road into the Roman town provided an early indication of a garrison and its likely location. In 1928, a third military tombstone was found close to the Royal Grammar School and, in 1932, aerial photographs revealed four roads that appeared to converge on this area and that were deemed military in origin (Hawkes and Hull 1947, 16). Separate investigations of the area in the 1930s by local schoolmaster A F Hall and Rex Hull led to the discovery of two substantial ditches thought to belong to unfinished military camps (ibid, 20). This evidence, combined with a lack of finds from elsewhere, led Hawkes and Hull to conclude that a military establishment had been situated in the vicinity of the Grammar School, rather than on the site of the later *colonia* or at Sheepen. By the time of the publication of *Roman Colchester* in 1958, observations within the walled town had only revealed one possible pre-*colonia* street (Hull 1958, 70, no. 169).

The extensive Sheepen excavations by Hawkes during the 1930s identified continuing activity on the site after the invasion (Fig 4.9; Hawkes and Hull 1947, 52), but his early interpretation of the Sheepen Dyke as part of a Roman invasion camp (Hawkes 1932, 74) was proved wrong. The next three decades witnessed numerous investigations of the dyke system. Excavations by Hull in 1936 and 1956 revealed the double ditches of Prettygate Dyke while in 1961 Hawkes sectioned the Triple Dyke, leading to its tentative recognition as an early Roman triplication of the native Shrub End Dyke and the theory that these two earthworks formed part of a temporary invasion camp for the Roman army (Fig 3.2; *CAR* 11, 55–61).

With the reconstitution of the Colchester Excavation Committee in 1963, archaeological activity became concentrated on the modern town centre, where Rosalind Dunnett directed a number of excavations. Her work during the 1960s was supplemented by the activities of various amateur archaeologists and the museum staff (Fig 5.1). In 1963, the Archaeological Research Group located a north–south ditch on North Hill (Crummy 1977a, 69) and in the following year excavations by Dunnett at East Stockwell Street revealed a turf rampart that she thought may have been part of a north–south defensive work (Dunnett 1971a, 39). Philip Crummy has since postulated that these two features belonged to an early fort pre-dating the legionary fortress (Crummy 1977a, 69). Dunnett discovered a second defensive ditch in 1964 at Nunn's Road car park, which, together with a length of east–west ditch located at 44 North Hill in 1967, may have belonged to the

legionary fortress (ibid, 101), although a post-Boudican date was originally favoured (*CAR* 3, 3). Further excavations at the Nunn's Road car park site in 1965 resulted in the discovery of several Claudian pits, which appeared to pre-date the foundation of the *colonia*. Work in 1966 on the adjacent Telephone Exchange Site revealed features that Dunnett considered to belong to a military building dated between *c* AD 43 to 49, and excavations in 1967 at St Mary's Rectory recovered early pits containing military equipment and later military-style building structures. The combination of all these discoveries led Dunnett to postulate that the remains of a fort lay under the North Hill area of the town (Dunnett 1971a, 2). Her work in Colchester culminated in 1970 with the excavations at Sheepen, where she confirmed an intensification of manufacturing activity on the site in the period immediately after the invasion (Niblett 1985).

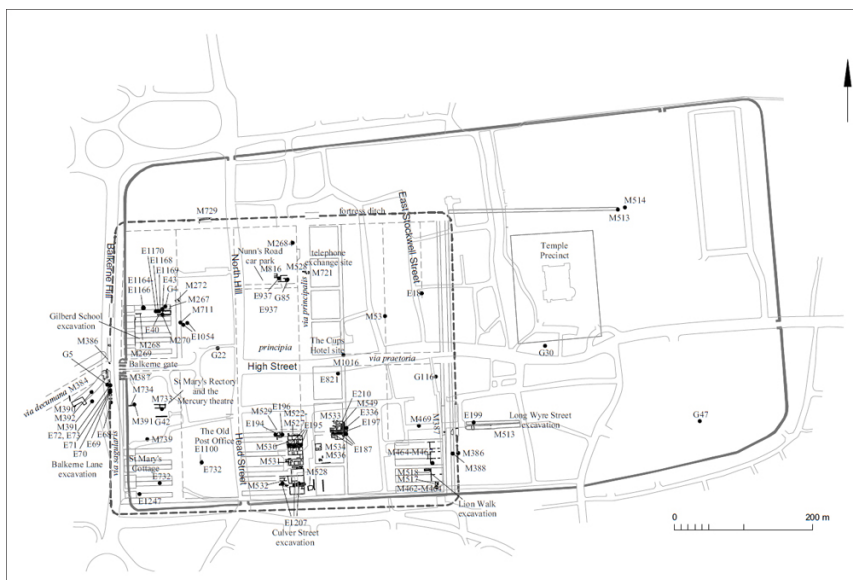


Fig 5.1 The legionary fortress and annexe; distribution of find spots, monuments and significant elements shown in relation to the later Roman town wall.

In 1972, excavations led by Philip Crummy at Lion Walk resulted in a breakthrough, with the discovery of two substantial bank and ditch earthworks belonging to the fortress and an annexe to the east. West of the earthworks was an intervallum road that bordered seven barrack-type buildings associated with finds of military equipment (Fig 7.13; *CAR* 3, 31–6). During excavations at the Cups Hotel in 1973–4 an early north–south street was observed on a different alignment to the site's post-Boudican buildings and in 1974 excavations at the Lion Walk United Reformed Church revealed a further section of the fortress ditch (*CAR* 6, 330, 379–81). The discoveries of the early 1970s led to a re-examination of the *colonia*'s street layout that resulted in the first tentative plan of the fortress (Crummy 1977a, fig 3). This was based on the assumption that many of the civilian streets on the west side of the town were of military origin and took advantage of the fact that the fortress seemed to be aligned differently to the eastern part of the *colonia*.

More information on the plan of the fortress was forthcoming from excavations at Balcerne Lane in 1973–6, which revealed the fortress's western ditch (MON386) and

intervallum road where they had been predicted (*CAR* 3, 93–4), and at Long Wyre Street in 1978–9, during which a further section of the ditch and rampart of the annexe defences was uncovered (*CAR* 6, 358). The plan of the fortress was finally confirmed during exploration of the Culver Street site between 1981/2 and 1984/5, where the remains of six barrack blocks, the *via principalis* and two or three buildings identifiable as the centurion's quarters of the First Cohort were discovered (Figs 5.1, 7.10; *ibid.*, 21–5). Elsewhere, aerial photography in 1976 showed that a rectangular enclosure at Gosbecks was a small Roman fort that had been butted against the rear of Heath Farm Dyke (Figs 3.2, 4.8; Wilson 1977, 185–7).

Further advances in the early 1980s resulted from a watching brief at St Mary's Cottage in 1982, during which the discovery of a military building allowed the conjectural reconstruction of six barrack blocks in the south-west corner of the fortress (*CAR* 3, 3). Excavations at the Gilberd School in 1984–5 provided important new information about the internal layout and planning of the barracks with the first detailed investigation of *contubernia* (*CAR* 6, 127).

Since the mid-1980s, fortress deposits have been encountered on a number of occasions during small- and medium-scale excavations by archaeological contractors including the Colchester Archaeological Trust and AOC. For example, barrack buildings have been identified during watching briefs at Head Street Post Office in 1984 (*CAR* 6, 1028) and the Sixth Form College in 1997 (CAT Report 7/97g), and during an evaluation at the Mercury Theatre in 1997 (CAT Report 6/97a). Most recently, the major town-centre excavations at the Head Street Post Office site have provided a further opportunity to investigate the fortress-period deposits found during previous investigations there (Fig 5.1).

The finds evidence

by Nina Crummy

In terms of material culture, this period is often discussed in tandem with the succeeding one (Chapter 6, the pre-Boudican colony). This is largely due to the short time span of the two periods, with the same glass and pottery vessels being current in each (*CAR* 8, 211–13; *CAR* 10, 488–93), but the reuse of the buildings of the legionary fortress by the veteran colonists also means that some archaeological levels cannot be established as belonging to one period or the other with any degree of certainty. Nevertheless, sufficient contexts can be clearly attributed to either Colchester Period 1 or Period 2 to allow some distinctions in both material culture and diet to be established between, variously, the fortress and the early colony, specific areas of the fortress, the fortress and its *canabae*, the fortress/colony and Sheepen, and the fortress/colony and the Trinovantian hinterland (eg Luff 1985; *CAR* 10, 488–91; *CAR* 12, *passim*; Cool 2006; Middleton *et al* 2006; Pitts and Perring 2006; Eckardt 2007; Crummy *et al* 2007, 279–90). There is considerable potential for further work along these lines, not least because the various elements of settlement within the study area encapsulate current themes in theoretical archaeology concerned with identity, gender and consumption. However, leaving aside the problem of residuality, such studies do not necessarily produce clear-cut results. For example, Late Iron Age items in use by the indigenous people of the area at the time of the Conquest would have continued in use for several years after that event (Crummy *et al* 2007, 272, 283, 288–9, 316) and the use of gendered finds to distinguish between the military phase and the pre-Boudican colony within the footprint of the fortress is limited by the recovery of some female dress accessories in Period 1 contexts and by retention of arms and armour by the retired soldiers

settled in the new colony of Period 2.

Stratified military equipment has been found on many sites within the study area, with particularly important assemblages coming from within the fortress, from the extramural *canabae* and from the industrial site at Sheepen (Hawkes and Hull 1947, 335–40; *CAR* 2, 129–40; Niblett 1985; *CAR* 6, 187–91; Benfield in prep. b). A few pieces of military equipment found at Gosbecks may relate to the fortress or the nearby fort (Benfield 2008a). As well as the military equipment that defines the essential character of the fortress, this period also demonstrates the early importation of items that represent new trade networks, new construction techniques, new styles of living and new ways of expressing identity, such as glass and ceramic vessels, tiles and building stone, oil lamps, querns of German lava, dress accessories and many other small artefacts (Hawkes and Hull 1947, 308–49; *CAR* 2; *CAR* 6, 141–250).

Together the fortress, *canabae* and Sheepen have produced the largest tightly dated collection of early Roman pottery in Britain, with stratified groups providing evidence for a variety of forms and fabrics not imported before the Conquest. There is also evidence for local production of imitation fine wares and for new coarse wares, the latter perhaps made by potters following Legio XX to Britain from Novaesium (Hawkes and Hull 1947, 275–84; Niblett 1985, 50–1; *CAR* 10, 488–93). There is a fine assemblage of glass from both the fortress and the early colony. Also, a pioneer comparative study involving the environmental evidence and the glass and ceramic vessel assemblages from the fortress, early town and Sheepen, stresses the value of the Colchester data (Harden 1947, 289; Niblett 1985, 136; *CAR* 8, 211–13; Cool 2006). Environmental sampling and examination of the faunal remains have provided evidence for the military diet, with material recovered from latrine pits demonstrating the importation of luxury items such as opium poppy, grape and fig, as well as the more mundane presence of cereals and meat-bearing bones (*CAR* 6, 273–87). Luxury is also evident in the recovery of a substantial quantity of eggshell-ware drinking cups and other fine-ware cups from a latrine pit in a tribune's house (*CAR* 10, 227, 242; Cool 2006), and vessels of this kind associated with high-status dining can form the basis of comparison with pottery recovered from legionary quarters.

The coin assemblage from the fortress, *canabae* and Sheepen is also of major importance, with Colchester being a point of entry and dispersal for large quantities of Roman currency. Studies of die-linked Claudian *aes* were at one time thought to suggest that a minting centre for the new province might have existed within the fortress and early *colonia*, but more recent work on the continent has shown that the British coin supplies came from *officinae* set up in Gaul and Spain (Hawkes and Hull 1947, 143–67; Niblett 1985, microfiche 3:B4-5; *CAR* 4, esp. 24–41; *CAR* 6, esp. 295–307; Besombes and Barrandon 2000). Research potential here includes not only the numismatic aspects of coinage but also the economic aspects of how the fortress and colony, with their (principally) monetary economy, operated within the (principally) barter economy of the rural hinterland.

New building materials and new construction techniques were introduced at the Conquest, with considerable stratified evidence for the use of several forms of tiles and bricks, the early importation of high-quality stone and Roman exploitation of British stone quarries, as well as the early use of wall paint (*CAR* 6, 170–6, 225–9, 251–72; Middleton *et al* 2006). All these aspects of construction and decoration can be seen as the first elements in sequences of practice and supply that continued up to the late Roman period.

The industries and crafts required to support the legionary fortress would have been essentially the same as those required to support an urban population, with a major distinction being that in the case of the Colchester fortress, many more necessities would

have been imported rather than locally sourced, as it was the first established during the conquest of the new province (Breeze 1984; Fulford 2004). That evidence for industry in this period might be limited is therefore to be expected, but pottery production has already been mentioned above, copper-alloy objects were produced at Sheepen during this period, and tanning and other aspects of leather-working also appear to have taken place there (Niblett 1985, 24–5, 146). Recent research has shown that there was a complex relationship between the Roman military, tanning technology and leather supply, providing a wider context for the probable tanning pit and dumps of cattle bones from post-Conquest Sheepen (Niblett 1985, 9, 24, 146; Driel-Murray 2001, 64–5). Brass-making crucibles were found at Culver Street, as well as fragments of other crucibles of Late Iron Age form used for silver-melting; traces of copper-alloy working came from Lion Walk; and the Gilberd School site (now the Sixth Form College) produced evidence for the manufacture and repair of military equipment (*CAR* 3, 36; *CAR* 6, 131, 194–7, 241–3). Limited evidence for iron-working was found in the fortress annexe and in the *canabae* at Balcerne Lane (*CAR* 3, 31, 94, 101–2). Although this evidence is quite limited and suggests that iron-smithing was quite a short-lived activity, the value attached to the tools, bar iron and any scrap collected for recycling is such that evidence from London and other sites in the south-east later on during the Roman period, shows that the location of a smithy can often only be inferred by the hearths and a little iron-working waste dumped nearby (for example, Drummond-Murray *et al* 2002, 61–2, 67, 83, 98; Woodfield and Johnson 1989, 231, 234).

Salt-production seems to have continued at Sheepen (Niblett 1985, 23), although, as in the pre-Conquest period, interpretation of salt-refining equipment is somewhat ambiguous. Many other crafts and industries, most of them cold technologies, can be inferred even in the absence of any direct evidence, such as animal husbandry and butchery, bone-working, joinery, carpentry and tile production.

The funerary evidence for this period is not well-defined, principally because of the difficulty of separating vessels belonging to Colchester Period 1 from those of Colchester Period 2, but some cremation burials from the immediate vicinity of the fortress may be of serving soldiers. Finds from early burials are discussed more fully in the next chapter. Some human remains, showing signs of violence, were found in the legionary ditch at Balcerne Lane and, although possibly post-dating the departure of the legion, the skulls found in this group may have been exposed on the nearby fortress gate (*CAR* 3, 94–6). They raise the point that a formal burial rite was not necessarily an essential part of the disposal of human remains.

The archaeological evidence

by Adrian Gascoyne

Military structures outside the legionary fortress

Two of Colchester's dykes have been tentatively identified as Roman modifications of native earthworks which, along with Lexden Dyke to the east and the river Colne to the north, were utilised to form the defences of a temporary camp for the Roman invasion army (Fig 3.2). The Triple Dyke (EHCR 11636) consists of three parallel V-shaped ditches, each with an eastward rampart. The innermost rampart can be traced further south near Dugard Avenue and may have originated as the late Iron Age Shrub End Dyke, although no firm dating evidence has been recovered for either construction. The linear dyke appears to have run for 1.5km from the river Colne to the north towards Prettygate Dyke to the south.

Such multiple defences are not known elsewhere in late Iron Age Britain. Its morphology, along with the excavation of hobnails from the ditch fill in 1961, suggests a Roman date and led Hawkes to believe that it was part of a temporary camp for the invasion army (*CAR 11*, 59, 174). The Prettygate Dyke (EHCR 11639) runs roughly east–west between Shrub End Dyke (EHCR 11640) and Lexden Dyke (EHCR 11628) and has been shown by excavation to consist of a bank with ditches on either side. The dyke's southern ditch may have been a Roman addition to a native earthwork. When excavated, this was shown to have been reversed at some point in its history, with the defensive aspect moved from the north to the south side. Hawkes saw this as more evidence that the land between Lexden Dyke Middle, Triple Dyke and Prettygate Dyke had housed Claudian forces (*CAR 11*, 61–2; Crummy 2001, 35–6). Despite extensive building development in recent decades, few finds of Roman material have been made in the area of this hypothetical camp. However, the absence of artefacts is not conclusive, given that the objects used by a mobile army are much less likely to have entered the archaeological record than those of a settled garrison, and that known encampment sites are commonly poor for artefact retrieval (Millet 1990, 45). An unidentified rectangular earthwork crossing the line of Shrub End Dyke has been recorded as a cropmark and confirmed by two sections in 1997. The ditch of this 'camp' was at least 2.3m deep, although unfortunately no dating evidence was recovered (*CAR 11*, fig 6.1 folio map; CAT Report 5/97a).



Fig 5.2 An aerial photograph of the Roman fort at Gosbecks taken in 1979 (Ida McMaster).

Other ditches thought to belong to temporary military camps have been excavated in the area of the Colchester Royal Grammar School. The rounded 'camp-ditch' some 18ft (5.5m) wide (ELM986) found by A F Hall close to Gurney Benham House was initially viewed as an unfinished work that may have been intended for a 'semi-permanent legionary camp' (Hawkes and Hull 1947, 20). Hull later argued against this interpretation (Hull 1958, 274), preferring the idea that it was an extraction trench for the construction of a road (MON794), but Hawkes remained in favour (*CAR* 11, 65). It was suggested by Hull (Hull 1958, 271–3) that a V-shaped ditch with 'cleaning slot' some 32ft (9.75m) wide, discovered at Altnacealgach House in 1939 (ELM994), might represent a second 'unfinished fort'. Philip Crummy has since suggested an agricultural function (Crummy 1977a, 90), and a watching brief in 1996 disproved the ditch's continuation along the north side of the suggested enclosure (CAT Report 2/96b).

Gosbecks fort

The Roman fort at Gosbecks (EHER 11645) is known from a series of exceptional aerial photographs taken in the 1970s that revealed its position less than 300m to the north-west of the pre-Roman farmstead (Figs 4.8, 5.2). The fort is butted up against the rear of the settlement's innermost dyke (Heath Farm Dyke), which it appears to have utilised as its western defences (Wilson 1977, 185–7). On the north, south and east sides, the fort's defences consisted of a single ditch and rampart with the latter supporting a double timber revetment. Only the fort's northern entrance can be seen clearly, although the southern entrance is also partially visible and it is likely that there was no *porta decumana*. Evidence for a gate in the northern entrance takes the form of four large post pits at the ends of the rampart's double revetment. In front of the gateway a causeway 9m wide interrupts the fort ditch.

The construction trenches of some of the fort's internal buildings are also visible and show that the structures were aligned east–west. The *principia* can be seen clearly, as can two long buildings in the north-west corner of the fort. The *via principalis* and *via praetoria* are the only streets that can be distinguished with any clarity, although a large number of pits lie in east–west lines and appear to have been dug along the minor streets. Pits are particularly clear along the outer edge of the intervallum road on the fort's north and south sides.

Short of excavation, only the plan of the fort can offer any help with close dating. Its plan (particularly the lack of a *porta decumana*) is shared by three other forts of the period which all date to the fifth decade AD. However it seems unlikely that it would have been occupied at the same time as the legionary fortress, built 4km to the north. A date prior to the fortress's construction or soon after its abandonment is thus most probable (*CAR* 11, 101). Internally, the fort measures approximately 1.6ha and could have accommodated either a cavalry *ala* or an infantry cohort. Finds of military equipment, including pieces of horse harness, may support the view that the garrison was a cavalry unit (Crummy 1999c, 20–1). Whatever the nature of the garrison, its function appears to have been the control of the native settlement at Gosbecks, although Creighton has suggested a pre-Roman date for the fort, implying the accelerated Romanisation of the pre-Conquest tribal leaders (Creighton 2001, 7–9).

Fingringhoe supply base

A military supply base is known at Fingringhoe Wick (EHCR 2113), where a large assemblage of imitation Claudian coins, military equipment and Claudian pottery, including

an impressive range of fine wares, was collected ahead of gravel quarrying between 1920 and 1950 (Hawkes and Hull 1947, 19–20; Willis 1990, 30–4). The finds came mainly from small rubbish pits arranged in parallel rows, as if associated with barrack buildings (Dunnett 1975, 39). The settlement was sited on a headland at the mouth of the Colne estuary in a strategically commanding position, 8.8km downriver from the legionary fortress at Colchester (see Fig in Introduction). Its coastal location suggests that it was a supply base or depot which served the fortress.

The road network

It is a generally held view that much of the Roman road network in southern Britain was created within the first few years of the invasion, and that it was established primarily for military purposes linked to the army's communication and supply needs and to the control of the conquered territories. In the area around Colchester, several roads which are likely to be military in origin can be identified, but only two minor examples have been securely dated to this period (see Fig in Introduction, Fig 3.2, Fig 7.22). Probably one of the earliest major roads was Stane Street (EHCR 8646), which may have been a pre-Roman routeway (Margary 1955, 222; Hull 1958, 2) linking Camulodunum's trading settlement at Sheepen with tribal territories in Hertfordshire. In its Roman form the road approaches Colchester from the west and appears to pass through Lexden Dyke at some point close to the modern Lexden Road. To the east of the dyke its course is less certain, although excavations in the vicinity of the Royal Grammar School have revealed several stretches of road metalling, including a late 1st-century three-carriageway road (MON794), suggesting that the road followed a course to the south of the legionary fortress. This interpretation is supported by the location of military tombstones in the vicinity together with excavations at Balcerne Lane, which showed that a thinly metalled spur (MON384) led out from the fortress's *porta decumana* in a south-westerly direction, presumably to meet with this main road. A second minor road (MON448) may have linked Stane Street to the military depot at Sheepen.

Outside the UAD study area, Stane Street meets the London–Colchester road at Marks Tey, where the road alignments indicate that Stane Street was the earlier of the two (Margary 1955, 222). Eddy has argued that the line of the London–Colchester road represents a relatively late phase of road building, rather than a by-product of the invasion campaign as has previously been assumed, and excavations at Chelmsford have dated its construction to c AD 60–5 (Eddy 1995, 126). To the south of Marks Tey, at Easthorpe, a Roman road (EHCR 8672) appears to head directly for the native sanctuary at Gosbecks, running parallel to Stane Street. However, trenches across the projected line of the road at Dawson's Green and Gol Grove failed to locate any road structure (EHCR 11731; Fawn 1993, 9) and the evidence for the road is inconclusive.

Another road that is likely to be military in origin is the route between Colchester and Cambridge, which may have followed the line of march of the Ninth Legion in its advance towards Lincolnshire. Two candidates for this route were tentatively identified in 1932 from aerial photographs that showed 'tramways' converging with the line of Stane Street at a point just west of Gryme's Dyke. The more northerly of these features was confirmed as a road by excavations in 1936 (EHCR 12646), which suggested to Hull that the road was early in nature (Hawkes and Hull 1947, 16; Hull 1958, 12). Other main roads have been postulated heading north (EHCR 9172) towards Nayland and east towards Mistley (EHCR 2573), but these remain to be investigated (Farrands 1975, 5–6).

Siting, preparation, laying-out and construction of the fortress

The legionary fortress was carefully sited at the end of a spur of land with falling ground to the north, south and east, commanding good views along the surrounding valleys. Located immediately downstream from the native settlement at Sheepen, it was situated within the defences of the native *oppidum*, close enough to the river to take advantage of waterborne transport, and adjacent to the spring line to ensure a good supply of fresh water. Although there is minimal evidence for Iron Age occupation of the site prior to the construction of the fortress, Philip Crummy has postulated that it may have been preceded by a smaller, perhaps unfinished, fort (Crummy 1977a, 69). The existence of such a structure was suggested by a deep pre-Boudican north-south ditch on North Hill (ELM1253) and an early turf rampart (ELM18) situated 175m to the east at East Stockwell Street, which Dunnett felt may have belonged to a north-south defensive work (Dunnett 1971a, 38-9). There is no evidence linking the two features together, however, and their dating remains imprecise.

Evidence from a number of places within the town points to extensive preparation of the fortress area prior to construction work commencing. At Lion Walk and Balkerne Lane topsoil had been removed over practically the whole of the excavated areas and shallow pits may have resulted from the grubbing out of trees and bushes (CAR 3, 31, 93). Stripping at Culver Street included areas of the underlying subsoil, and the site of one of the barrack blocks at the Gilberd School had been terraced to counter the effects of the natural slope (CAR 6, 128). The clearance was not total, though: a watching brief in 1983 within the Castle Park revealed a distinctive turf-line surviving beneath what may have been the remains of the annexe rampart (ibid, 371).

The layout of the fortress is now sufficiently well known from excavations for Crummy to have determined how it was designed and set out on the ground (CAR 3, 3-5). Covering an area of about 20ha, it was the normal size to be expected for a legion (Johnson 1983, 31). It had a large annexe on its east side, the exact position and extent of which remains unknown. The fortress was aligned to true north, its longitudinal axis running east-west so that the *porta praetoria* faced seaward (east) and the *porta decumana* lay at the highest part of the site, in the manner described by the Classical writer Hyginus (ibid, 41). It appears to have been neat and regular in plan although some distortion of the north-west corner was caused by the severity of the northern slope and the buildings themselves were not always laid out accurately (CAR 6, 7). The layout of the interior appears to have been fairly standardised, with much in common with the fortress at Caerleon in south Wales (CAR 3, 3), although one unusual feature is the large amount of open space that there appears to have been. Open space existed to the north of the barracks at both the Gilberd School and Culver Street, and at the Gilberd School there were also gaps at the ends of the barracks (CAR 6, 10).

Evidence for early activity associated with the building of the fortress includes construction deposits at both the Gilberd School (MON267) and Culver Street (MON522, MON523). There were also a number of pits, including three bowl-shaped ovens or furnaces, a hearth and an oval pit (GRP11) at Culver Street (CAR 6, 37-9). The latter was similar to the early pits (GRP85) containing pieces of military equipment that were excavated by Dunnett on North Hill in 1965 (Dunnett 1971a, 29) and St Mary's Rectory in 1967 (GRP42) (ibid, 63-4). It is therefore possible that the Culver Street pits could have been contemporary with the earliest buildings on the site (Crummy 1977a, 82).

Fortress defences

The legionary fortress and its annexe were provided with defences of identical construction,

consisting of a V-shaped ditch and rampart with berm between. The defensive ditch (MON386) and rampart (MON388) of the fortress have been recorded at Lion Walk, Balcerne Lane and Lion Walk United Reformed Church (*CAR* 3, 31, 93; *CAR* 6, 379–81), while the ditch (MON513) and rampart (MON514) of the annexe have been positively identified at Lion Walk, Long Wyre Street and, less conclusively, in Castle Park (*CAR* 3, 31; *CAR* 6, 358, 370–1). Drury has also suggested that the street between *Insulae* 22 and 14 of the Roman town may preserve the line of the northern annexe defences (Drury 1984, 22). Two lengths of east–west ditch were observed by Rosalind Dunnett in the 1960s, at 44 North Hill and 400m to the east at Nunn’s Road (Crummy 1977a, 101). These were thought to be part of the same feature (MON729) and may have belonged to the fortress’s northern defences, although Crummy has offered an alternative, post-Boudican origin (*CAR* 3, 3).

The eastern arm of the fortress defences was traced at Lion Walk for 53m and at Balcerne Lane the fortress ditch could be followed over a distance of 138m (*CAR* 3, 93). The ditch was found to be 2.5m deep at Lion Walk Church, while its width varied between 3.6m at Lion Walk Church, 4.5m at Balcerne Lane and 5.5m at Lion Walk. Variations in width were partly due to erosion, which had also affected the ditch’s profile. For this reason the recorded dimensions of the back-filled ditch and berm may not accurately reflect the original sizes.

The fortress rampart was built from a bank of sand between two revetment walls of sun-dried blocks of sandy clay. These rested on a foundation of closely packed timber-corduroy that lay across the full width of the rampart and at right angles to it. Topsoil was removed prior to construction. At Lion Walk the rampart was 3.8m wide (*CAR* 3, 31) and, at the Lion Walk Church site, 3.0m in width (*CAR* 6, 380). It was separated from the ditch by a 1.6m-wide berm which, at Lion Walk, was covered by a layer of sandy clay loam extending into the ditch. This may have been intended as a lining to prevent erosion, although it could also have been demolition debris from the rampart. At the Balcerne Lane and Lion Walk Church excavations, the ditch’s upper backfill was derived from the demolished rampart. No dating evidence for the destruction of the defences has been recovered from any of the sites, but stratigraphical relationships observed at Lion Walk and the Lion Walk Church indicate a date between AD 50 and 55 as being the most likely (*CAR* 6, 381).

A causeway 9m wide separated the fortress defences at Lion Walk from the annexe ditch and rampart. The annexe ditch was recorded here over a distance of 40m running in an east–west direction at right angles to the north–south ditch of the fortress. It was 2.5m deep and between 5.0m and 5.7m wide. The rampart, at 4.1m across, was slightly wider than that of the fortress. The blocks that formed the rampart revetments were irregular in size except for their thickness, which was almost uniform (100–120mm), allowing the face of the rampart to be coursed (*CAR* 3, 31). There is no conclusive evidence to suggest that timber lacing was used in either the fortress or annexe ramparts.

Nothing is known about the fortress gates and angle or interval towers other than their likely location, and excavations on the predicted site of the *porta decumana* at Balcerne Gate have so far failed to reveal evidence of the earliest construction. The fortress ditch terminals were recorded at Balcerne Lane, however, showing that entry into the rear of the fortress was via a 14m-wide earth causeway (*CAR* 3, fig 80).

Fortress streets

The streets of the fortress have been observed at 11 different locations within the town (Fig 5.1) including: the *via principalis* (MON528) at Culver Street (*CAR* 6, 49) and the

Telephone Exchange Site (Dunnett 1971a, 8); the *via quintana* (MON272) at the Gilberd School and Freda Gunton Lodge (*CAR* 6, 131–2); and the *via sagularis* (MON387) at Lion Walk and Balcerne Lane (*CAR* 3, 37 and 94). The *via sagularis* was set back 9m from the inner face of the fortress rampart but no equivalent has been recognised within the fortress annexe. Table 1 lists up to 15 lesser streets, *via vicinariae*, that have been recorded within the fortress.

Some early metalling may have belonged to yards or similar features. At Culver Street it was evident that the streets between some buildings had been laid out and left unsurfaced for some time. Other streets at Culver Street (MON549) and the Gilberd School (MON268) were only partially surfaced, or not at all, suggesting that the surfacing of minor streets was not a priority. Those that were metalled varied considerably in the quality of their construction, which ranged from a very thin layer of sand and gravel metalling directly overlying the 'natural' to a well-laid, flat and well-compacted surface 0.3m thick with a neat camber over make-up of sand and gravel. The width of individual roads also varied from 4.4m (the *via sagularis* at Lion Walk) to 7.5m (the *via principalis* at Culver Street) and 7.6m (the *via sagularis* at Balcerne Lane).

Barrack blocks

A total of 22 structures within the fortress have been identified as probable legionary barracks, as shown in Table 2. The barrack blocks were aligned east–west and were built either singularly or as a pair, back-to-back and sharing a spine wall. Minor streets separated facing pairs of barracks. Crummy has determined that there would have been at least 60 barracks in the fortress (Crummy 2001, 46), each one providing the accommodation for a century of soldiers and their centurion.

Although none of the barracks (*centuriae*) has been completely excavated, the available evidence suggests that they were at least 69m long and approximately 10m wide, with considerable variation apparent between different sites. Almost one-third of the barrack block's entire length was taken up by the centurion's quarters, which consisted of a self-contained unit at one end occupying the full width of the block and measuring approximately 10m by 18m. Internally, the layout of the centurion's quarters were all different, with rooms of varying size. The differentiation between the men's quarters and those of the centurion also varied, but in at least one instance at Lion Walk (CAT Building 5; MON466), they appear to have been separated by a narrow passage or room. The men's quarters were narrower than those of the centurion and were divided into individual rooms (*contubernia*) by internal partition walls. At the Gilberd School the barrack blocks are thought to have housed 14 *contubernia*, each of which measured roughly 3.69m by 5.78m. One of the barrack blocks at Culver Street (MON524) may have included stalls for stabling, although this interpretation remains tentative (*CAR* 6, 24). The centurion's quarters in the Culver Street barrack blocks were larger than any of the others excavated in the town (Fig 7.10) and Crummy believes this may be due to its seniority (Crummy 2001, 46).

There is no convincing evidence from any of the excavated barracks that the *contubernia* had been subdivided into separate areas for sleeping and storage. Internal features included hearths, ovens, pits, stakeholes and slots, timber-lined drains, gullies, latrine pits and the occasional neonatal burial. It is likely that the external space between each *contubernium* and its adjacent street incorporated a veranda, although the evidence for these is uncertain (*CAR* 6, 131). Other external features associated with the barracks included drainage gullies, timber-lined drains, pits and hearths.

Other military buildings

In addition to those buildings thought to be barrack blocks, up to five other military buildings have been identified within the fortress. At Culver Street, three structures lying along the east side of the *via principalis* were examined. Crummy has suggested that one (or more) was probably a tribune's house, the most likely candidate being Building 83 (MON533), which contained evidence of a varied diet and the use of expensive tableware by its occupants (*CAR* 6, 50). Each of the three buildings appears to have been large and rectangular or square in shape with a central courtyard surrounded by four ranges of rooms, although the plans of Building 84 (MON534) and Building 97 (MON555) were only very partially revealed. At least 12 rooms and the central courtyard were identified within Building 83 (MON533). These contained a variety of internal features including hearths, gullies, drains and a latrine. Building 84 (MON534) contained a large number of hearths together with evidence of metalworking and small-scale smithing, indicating that the building may have been a *fabrica* (ibid, 54–6). Further evidence for metalworking associated with a military building was found at Lion Walk (MON468), where a structure 6m wide was interpreted from pits, gullies and substantial amounts of dumped sand and sandy clay, together with a single surviving stone and mortar plinth and internal stakeholes (*CAR* 3, 35–6).

The military building at the Telephone Exchange Site (MON721) was a timber-framed structure located on the east side of the *via principia*. Evidence for the building was relatively slight and took the form of two gullies, postholes, pits, slots and stakeholes. Finds included military equipment but gave no clue as to the structure's purpose, although Crummy has speculated that it may have been one of a range of storage buildings lining the street (*CAR* 3, 3).

The purpose of the fortress annexe remains unknown, but it may have included one or more external structures often associated with forts, such as a parade ground or the legionary baths. Parallels with other fortresses suggest that the fortress garrison would have assembled on the parade ground to participate in religious and ceremonial occasions (Johnson 1983, 217), and one possibility, therefore, is that the extensive Temple of Claudius complex lies on the former legionary parade ground. A beam slot (ELM685) and postholes (GRP30) situated immediately to the south of the temple precinct could be military in origin.

Construction of the fortress buildings

The barrack blocks were all well built, with each load-bearing wall consisting of a superstructure of coursed, sun-dried, sandy clay blocks overlying a pair of timber ground plates which rested on a low mortar-and-stone plinth (*opus caementicium*). The plinths were either set within a construction trench or penetrated the natural sand by a few centimetres. Some of the internal walls were built using the same method, but most utilised a stud-and-wattle technique, consisting of a timber frame with a ground plate bedded directly onto the natural sand or posts set in a shallow slot. The panels between the uprights were filled with wattle and the complete frame was encased in daub (Fig 5.3). In two instances barrack walls were shown to have been rendered internally with keyed daub (MON522; MON524) but there was no evidence of them having been plastered. The barrack floors were basic in construction, being of sand or sandy clay, although the floors of three rooms within the centurion's quarters at Culver Street were made using wooden planks (MON522; MON524). Tiles from the Gilberd School site support the idea that the roofs of the barracks were tiled, and the strength of the barrack walls suggests that they were designed to

carry the weight of such roofs. Fragments of column brick were also found in the military levels at Culver Street, indicating their use in the legionary fortress. Only one barrack block (MON524) has provided evidence for the use of window glass.

The three (non-barrack) military buildings discovered at Culver Street were all solidly built, with walls constructed from squared or rectangular timbers dropped into a deep and continuous trench (a post-in-trench technique), in the style characteristic of Roman military sites. Internal walls were also built using this technique, although ground plates, stakeholes and slots indicated the positions of others (*CAR* 6, 50–7). The walls of the building at the Telephone Exchange (MON721) were also constructed from posts set into a trench, although the two excavated examples appeared to be less substantial than those at Culver Street. At least two of the buildings at Culver Street had tiled roofs, and the floors of all buildings were either of sand or sandy clay loam.

Industrial activity

In addition to the possible *fabrica* at Culver Street (MON534), metalworking is well attested from the fortress, as represented by areas of low-level activity within and around the fortress buildings. At Lion Walk, a metalworking site (MON469) that included two ovens or furnaces was examined together with several heavily burnt patches of daub associated with occupation debris containing charcoal and copper-alloy waste. Metalworking also took place at the rear of the annexe rampart, where slag and pieces of furnace lining were derived from one or more ironworking hearths. In addition, an external metalworking site (MON270) situated between two barrack blocks was recorded at the Gilbert School site. Finds from within one of the barracks (MON267) indicated that work on military equipment was taking place on a small scale within the building or in its immediate vicinity (Fig 5.1). The nature of metalworking within the fortress, as evidenced by these finds, appears to have been restricted to the ongoing maintenance and repair of equipment.

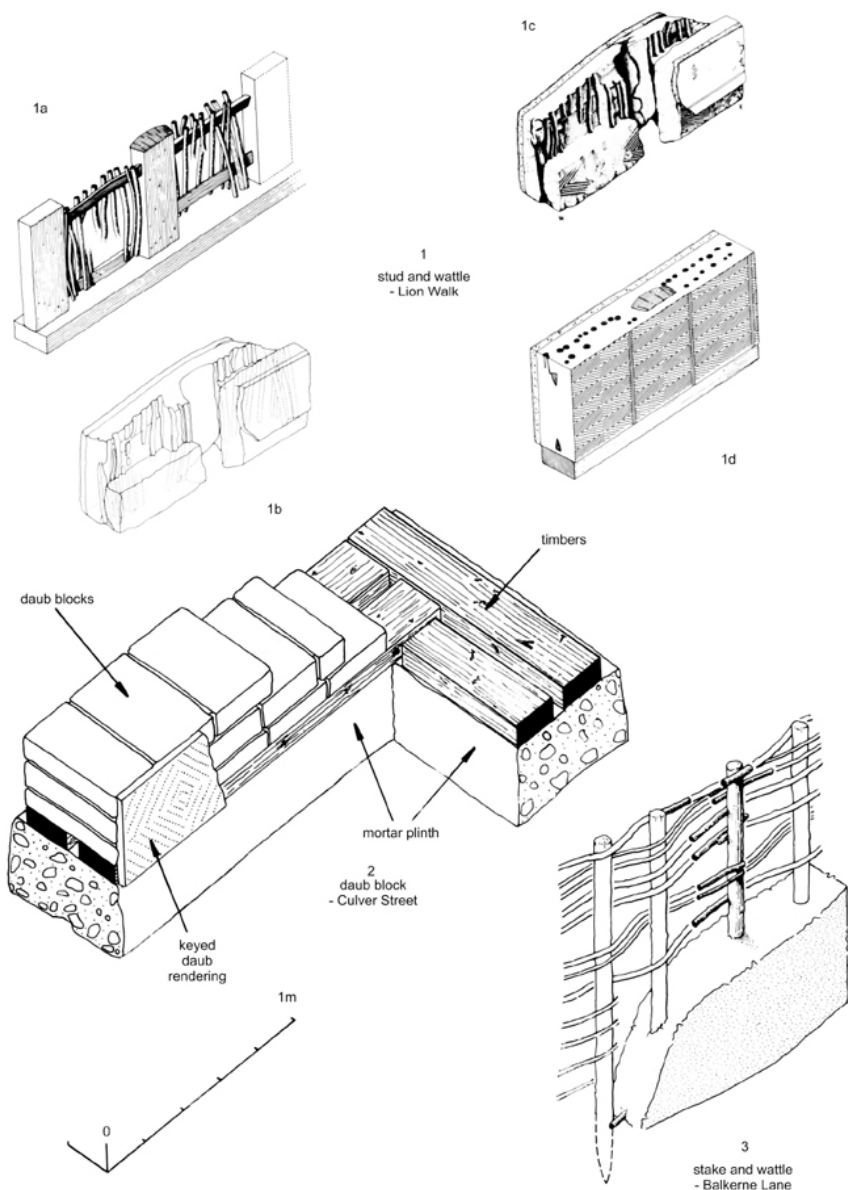


Fig 5.3 Construction methods for Roman walls, from Lion Walk, Culver Street and Balcerne Lane (Colchester Archaeological Trust).

Food, water supply and drainage

Evidence for the diet of the fortress's occupants has come from military latrines and related features inside the fortress, together with samples of refuse material from the civilian settlement at Balcerne Lane, some of which may have emanated from the fortress (*CAR 3*,

102). The evidence from Balkerne Lane indicates that the domesticated ox was the most frequently eaten animal, with large quantities of intensively butchered, meat-bearing cattle bone suggesting its consumption in stews or soups (Luff 1982). Sheep/goat and pig were also popular and the latrine pits at Culver Street produced evidence for the consumption of both fresh and saltwater fish. The latrine pits also provided evidence for the consumption of bran, figs, raspberries, grapes and elderberries, while the presence of ovens within the fortress show that bread would have been a staple. Although no direct evidence of contents has come from the *amphorae* recovered in the fortress, their presence, which mirrors finds from the Sheepen site (Sealey 1985, 57), indicates the consumption of wine, olive oil, fish products and *defrutum* syrup (Tyers 1996, 85–101). The mixed and varied diet represented by this range of foodstuffs fits well with the evidence from other forts in Britain (Davies 1971, tables I, II and III).

The fortress appears to have been deliberately sited so that it was close to, yet higher than, the spring line (*CAR* 3, 26–7). This would have provided for a supply of clean water but meant that it had to be carried, pumped or lifted from the springs or, alternatively, brought in via an aqueduct from a source some distance away. The decision not to incorporate a spring within the fortress defences seems strange, especially as no Roman wells have been found in the town and there is no conclusive evidence of a piped supply during the military period. The supply at this time may have been augmented by a leat (MON439) on the Sheepen site, which appears to have been built to carry water from the Sheepen Springs towards the fortress (Fig 4.9; *ibid*, 26). Cisterns and collecting tanks could have been used to collect rainwater, and the river Colne would have acted as a convenient freshwater source.

Within the fortress and its internal buildings waste water was transported via gullies and enclosed timber drains. Up to 11 drains (ELM39–40, ELM200–1, ELM203–7 and ELM335) have been located along the edges of the fortress's east–west streets and it would seem that even the minor streets between barracks were furnished with a drain along each of their sides. The drains fed waste water into north–south-running drains or ditches along the main streets (ELM1054, ELM335–6 and possibly MON528) before it was finally discharged into the legionary ditch or soakaways. At least three of the fortress buildings (MON267, MON522, MON533) had internal drains, which took waste water outside via breaches in their mortar plinths into the drains lining the streets. Most of these drains appeared to be associated with latrine pits or what may have been washing areas. Both internal and external drains were of variable build and quality, ranging from shallow gullies to timber-lined channels such as the one constructed of nailed oak planks (MON267) at the Gilberd School site (*CAR* 6, 131).

Disposal of the dead

Arguably the best-known burials from Roman Colchester are those of Marcus Favonius Facilis (Fig 6.3; ELM527) and Longinus Sdapeze (Fig 6.4; ELM532), whose fine memorial tombstones indicate the probable existence of a military cemetery situated alongside the main road to the west of Colchester (MON794). Facilis was a centurion of the Legio XX and Longinus a duplicarius of the Ala I Thracum (First Squadron of the Thracian Cavalry) and, together, these memorials suggest the names of two army units stationed at Colchester (Crummy 2001, 39; Wise 2001, 2005). However, despite the fact that both men appear to have been serving soldiers when they died, the tombstones cannot be taken as unequivocal evidence that their units were stationed in the fortress or that they died in the fortress period. Either of the men could have been based in Colchester during

the early years of the *colonia* (Phillips 1975, 102; Crummy 2001, 40). Furthermore an almost complete eggshell ware pottery vessel of AD 50–60 in the grave below Facilis's tombstone suggests that he died after the closure of the fortress (Hawkes and Hull 1947, 18 and 228–9; May, 1930, 264 and plate XXXI). A geological study of both tombstones has recently been carried out by Kevin Hayward which confirms that the limestone used for the Facilis tombstone was imported from a quarry in the Moselle region of France and that of Longinus from a quarry in Gloucestershire (Hayward 2009, 133–135). This may indicate that the Facilis tombstone is earlier than that of Longinus, being carved at a time before the Romans had discovered or started exploiting the Middle Jurassic outcrop of south-central England (P Sealey pers comm). Fragments of several other military tombstones have been located from this area, but none of them can be dated specifically to the period of the fortress. Equally uncertain is the date of the Claudian burials which have been found concentrated along the main road to the west and also to the south-west of the fortress (*see* chapter 6, page 86–7).

Several burials were discovered during the excavations at Balcerne Lane, where the scattered remains of at least six people (ELM68–ELM73) lay around the base and sides of the legionary fortress ditch. A number of the bones, including two crania, showed signs of having suffered heavy blows, and Crummy believed that at least one of these injuries had been inflicted during execution. He concluded that the remains were probably derived from a large number of corpses left at the *porta decumana* of the fortress, and found their way into the fortress ditch at some point before it was backfilled in c 55 AD (*CAR* 3, 94–7). Although it is unclear whether these were natives or disgraced soldiers, the fact that the *porta decumana* was, according to the historian Polybius, the gate through which soldiers passed on their way to punishment or execution, may be significant (Johnson 1983, 41). Within the fortress, at least one neonatal burial (ELM43) has been recovered from a military context (*CAR* 6, 130).

Claudian occupation evidence and Iron Age continuity

Evidence from the UAD study area for native continuity and other civilian activity during the period of the fortress comes mainly from the excavations at Sheepen and Balcerne Lane. Continuity of Iron Age occupation and land use is also indicated by the endurance of the native sanctuary at Gosbecks, together with a scatter of sites from around the peninsula where mixed assemblages of pre- and post-Conquest pottery have been recorded (*see* chapter 3). At Balcerne Lane, excavations revealed a small *vicus* settlement consisting of four or more buildings (MON390–1, MON392, MON394) that lined both sides of the main road (MON384) leading up to the *porta decumana* of the fortress (Fig 7.28). These were of a much simpler construction than the fortress buildings, with walls built from earth-fast stakes, wattle and sandy clay daub. The occupation debris associated with these rather insubstantial structures was characterised by a high proportion of charcoal containing much slag and hammer-scale, indicating intensive ironworking in what may have been a *canabae* serving the military market (*CAR* 3, 93).

The extensive excavations at Sheepen during the 1930s and in 1970 revealed an intensification of manufacturing activity in the early years of the military occupation, as the area was turned into what appears to have been a works depot (MON689) (Webster 1985, 114). This would have served the fortress and conceivably the wider campaigning army. In the immediate aftermath of the invasion, Sheepen Dyke (MON400) was filled in, and many of the native occupation sites appear to have been destroyed or went out of use (Hawkes and Hull 1947, 51). One 'hut' (ELM1258), found in the 1930s on what is now

the Colchester Institute site, had been singled out for attention and was totally destroyed by fire (Fig 4.9). The excavators linked this treatment to the apparent wealth of the occupants (Dunnett 1975, 24–5). A metalled road (MON448) was laid across the old entrance of the dyke on the line of the Late Iron Age trackway (MON 427; Hawkes and Hull 1947, 83). An early Roman ‘military-style’ V-shaped ditch (ELM570) with a flat-based slot was located in 1970 on the eastern edge of the site, and a possible aqueduct (MON439; Fig 4.9) was found to have been cut through the infilled Sheepen Dyke in an apparent attempt to bring water to the site from springs on its northern edge (Niblett 1985, 20–2). Unbroken settlement in the form of several ‘occupation-sites’ – for example, F15 (ELM77), F18 (ELM85) and F13 (ELM102) – continued particularly in the northern part of the site and other new ‘occupation-sites’ – for example, L5 (ELM118) – were constructed during the same period (Hawkes and Hull 1947, 67 and 104). These included two or possibly three compounds (MON684, MON1053 and ELM552–4) built using either post pits or palisade slots and associated with scoops, hollows, small pits, latrine pits (GRP18) and wells (ELM573; ELM120). At least one of the compounds (MON684) was being used for metalworking, and many of the associated features were filled with the refuse from metalworking activities, including fragments of broken military equipment, suggesting its recycling as scrap metal. The compounds were short-lived and appear to have become obsolete with the closure of the fortress, when activity on the site was intensified to meet the demands of the new *colonia* (Niblett 1985, 9). The production of leather hides may have been another significant activity on the site, as evidenced by large quantities of cattle bone. Several of the Roman pottery kilns, including Hull’s Kiln 34 (MON777) and Kiln 35 (MON778), are also likely to have belonged to this early period (Fig 4.9; *CAR* 10, 491).

Hawkes and Hull categorised the post-Conquest occupants of the Sheepen site as native conscripts or slave labour (Hawkes and Hull 1947, 38), but following the excavations of 1970, Webster regarded the industrial workers as civilian craftsmen working under military auspices (Webster 1985, 114). More recently, Bishop and Coulston have suggested that army production was more likely at Sheepen (1993, 185). Bidwell believes that the early pottery kilns on the site were probably associated with ‘immigrant potters following the legion from Novaesium (Neuss) to Colchester, or with production by soldiers of the legion’ (*CAR* 10, 491). A Claudio-Neronian mortarium recovered from a water main trench in Head Street bears the graffito ‘>IUSTI SUPIIRI’ (‘Century of Lustus Superus’) and may be evidence for military production (interim report in *J Roman Studies* 34, 91; *RIB* 2, Fas 6, 2496.2).

The current state of knowledge

by Philip Crummy

The existence of the legionary fortress has now been established beyond reasonable doubt. Each new exposure of the remains of the fortress reinforces the view that the military base was built on an unoccupied part of the *oppidum*. It is also apparent that the military occupation may have been multi-period, despite its brevity. The series of early pits on North Hill identified in the 1960s (Dunnett 1967, 29) seem to belong to an early phase of the military occupation rather than the pre-Roman settlement, and the relationships between the fortress and the early (?) rampart and ditch in East Stockwell Street and on North Hill respectively (Fig 5.1; Dunnett 1971a, 38–9; *CAR* 3, 5) have yet to be clarified. Identification of the garrison of the fortress is uncertain, but Legio XX seems the most likely option (Crummy 2001, 40). The presence of the Ala I Thracum cavalry unit, as

suggested by the tombstone of Longinus, is also unproven as the single gravestone could point to a temporary posting or a transitory visit (ibid, 40).

Almost all of the streets of the fortress have been plotted to within a few metres and it has been shown that the layout of the street system was devised in terms of multiples of 100 *pes Monetales* (CAR 6, 7–13). However, relatively few of the buildings have been investigated, and none of them have been uncovered completely. Most of the buildings which have been examined were barrack blocks. By chance, most of the excavations of the barracks have been of the centurions' quarters. The only other buildings which have been identified are tribunes' houses at Culver Street (Fig 7.10; ibid, 21–5). All the major buildings, such as the *principia*, the *praetorium*, the hospital, granaries and baths are yet to be identified, although the location of the *principia* is clear from the fortress plan.

The width and spacing of the barracks indicates that the fortress could have been much narrower than it actually was (CAR 6, 10). No other comparable Roman fortress appears to have had such large spaces between the front and rear barrack blocks, and it is hard to explain why this should have been the case here. Perhaps the garrison included more than a single legion and the extra troops lived in their tents. Maybe there was an early phase of the fortress when several units were brigaded together under canvas, or perhaps the extra room was needed by Plautius, since the fortress would presumably have been his winter headquarters. None of the fortress gates have been investigated, but sections have been dug across the defences, including those of the annexe (CAR 3, 31–4).

An interesting feature of the fortress is the variety of building techniques employed in the construction of its buildings (CAR 6, 21–5, 50–3). The use of mortared plinths appears to be almost entirely a characteristic of the military period, but wide walls of mud brick on timber ground plates such as those found at Head Street in 2000 (Brooks 2004b, 5–6) are more problematic. It is not clear why such widely different building methods were used in the fortress.

The full extent and purpose of the annexe are yet to be established. The street leading northwards from the presumed waterworks in *Insula* 15 appears to be on the military alignment (Crummy 1999b, fig 3), suggesting that the annexe may have been associated with the fortress's water supply and that it may have incorporated a bathhouse.

Despite the scale of some of the excavations within the area of the fortress, the number of military contexts which have produced pottery or other finds is modest compared with later periods. This disparity goes some way to explain the marked differences between the pottery assemblages from Sheepen and the fortress, as do stratigraphic and residuality problems at Sheepen (CAR 10, 488–91).

Other military establishments in the vicinity of the legionary fortress are the fort at Gosbecks (Fig 4.8) and the presumed supply base at Fingringhoe Wick. The broad elements of the plan of the four-acre fort at Gosbecks are clear from aerial photographs (Fig 5.2; CAR 11, 99–101; Crummy 2001, 44). Buildings appear to be of post-in-trench type, but none of them have a complete plan discernible. The clearest building is the *principia*, but it is still imperfectly known. The relationship of the fort defences to Heath Farm Dyke is not clear and the existence of a *via decumana* or *porta decumana* is uncertain. Almost no good dating evidence is available for the fort. Three possible contexts seem the most likely: AD 44–9, AD 50–60 and immediately post-Boudican. A pre-Conquest date has even been postulated (Creighton 2000, 7–9). Claudian material from the Fingringhoe Wick site, coupled with its riverside location, indicate the site of a supply base, but no good structural remains have been recorded to support this view (Hull 1963, 130–2; Crummy 1988a, 41).

British occupation within the pre-Roman *oppidum* seems to have continued on much

the same scale as before the Conquest. The Sheepen site appears to have become more industrialised after the Conquest (Niblett 1985, 23–4), whereas Gosbecks retained its more agricultural character (*CAR* 11, 95–105; Benfield 2008a, 46–7). Straight roads appeared in the landscape for the first time, as well as straight-sided enclosures, with the most important of the new roads being the one between the Roman *colonia* and Gosbecks. At least one of the dykes (Prettygate Dyke) appears to have been adapted to form the *agger* of a Roman road (*CAR* 11, 46–50). Continuity after the Conquest is observable in burial practice, especially at Stanway (Fig 4.7; Crummy 2001, 23, 26–8, 66–70). The large, square, ditched enclosure at Gosbecks, dated, by excavation, to c AD 50, may perhaps have been a Stanway-style funerary site for Cunobelin. There seems to have been a concentration of Claudian burials to the west and south-west of the fortress, particularly along the sides of the main road from the west. It is not clear to what extent these burials are military, native or later Roman (*see* chapter 6, pages 93–6).

Preservation

Possibly as much as 50 per cent of the legionary fortress has been destroyed by later excavation for pits, cellars and foundations. Large areas of the town which are sited considerably behind medieval street frontages can be well preserved (as was the case at the Culver Street site) because they were not subject to the intensive pitting which went on to the rear of medieval properties, and the fortress remains have escaped the damaging effects of the plough except for small areas in the Roman period (*CAR* 6, 33). Elsewhere, Gosbecks fort is less well preserved because of deep ploughing, while the site of the presumed military base at Fingringhoe Wick was badly damaged by gravel extraction during the first part of the 20th century and it is unclear how much of it now survives. There are unlikely to be any waterlogged deposits on the sites of the fortress or the fort at Gosbecks (though these may exist at Fingringhoe Wick), so there is probably very limited survival of wood, textile or leather. However, contemporary organic remains may exist in surrounding areas where the ground water can be high (*see* below). Iron objects survive poorly because of the acidity of the soil, although bone and other faunal remains can be found in good condition.

Importance

The legionary fortress at Colchester is worthy of intensive study because Roman fortresses in general are relatively rare. Few fortresses are known in Britain and abroad as compared with forts, towns and villas. Moreover, being Claudian, Colchester is an example of an early permanent legionary fortress in the Roman Empire. It is important in the study of the chronological development of Roman fortresses, because the base is well-dated and was short-lived, and it is the earliest known example in Britain (along with the vexillation fortress at Alchester in Oxfordshire, which has produced a tree-ring date of AD 44). The Fingringhoe Wick site is of interest because of its association with the legionary base and because supply bases are rare, especially those of so early a date.

Potential for future research

It may be possible, with further excavation, to determine when between AD 43 and AD 50 the fortress was established, and if it was ever finished. A great deal remains to be done in exploring the buildings of the fortress and annexe. Preservation is generally good, so that well-sited excavations should provide very worthwhile results. Similarly, the layout of the fortress could be further clarified, and the open areas around the groups of barrack blocks may be explained. The function of the annexe may be made clearer with further work. The

possible rampart in East Stockwell Street could be investigated further, and its date and purpose established. Similarly, the puzzling ditch on North Hill could be excavated to determine its relationships with the fortress and *colonia*.

More stratified material needs to be recovered from the fortress levels to compare with contemporary finds from Sheepen and elsewhere (*CAR* 10, 488–91). At present, it is hard to see a substantial pre-AD 50 component in the Roman pottery assemblage as a whole, presumably because the quantity of well-stratified finds from the military levels is relatively small. There are two reasons for the latter situation: firstly, many buildings were reused in the *colonia*, and consequently it is often impossible to distinguish military levels from early colonial ones; secondly, primary contexts such as the body of the ramparts or construction trenches for buildings do not generally produce many finds.

No modern archaeological excavation has been undertaken at Fingringhoe Wick, so any work there is bound to be of considerable value in assessing the date and function of the site. The most immediate benefit of excavations at the Gosbecks fort would be the recovery of dating evidence for its construction and period of occupation. Moreover, the temporal relationships between the Fingringhoe Wick site, the Gosbecks fort and the legionary fortress could probably be determined by such investigations. These would help to define a chronology for the military occupation at Colchester, which cannot as yet be established.

The character of early burial practice and the relationships of these burials to occupation areas could be clarified if the burials were widely mapped in detail. At present, it appears that many cremations were clustered together in small groups on odd bits of land and that there were concentrations of them close to street frontages and other boundaries. A more fully mapped distribution would show the extent to which they were grouped in large cemeteries, and how they related to occupation sites.

6 The early Roman *colonia*, AD 49–61

by David Radford

Introduction and historical framework

Having committed time and resources towards establishing a legionary fortress at Camulodunum, the Roman authorities subsequently decided to remove their troops and send them westwards into the borderlands of the emerging province. In south Wales, a local tribe, the Silures, were mounting stiff resistance so the governor, Ostorius Scapula, must have calculated that Camulodunum was sufficiently pacified to allow the release of the garrison. The covering move, made under instructions from the Emperor Claudius, was to situate a *colonia*, or colony of retired veterans, at Camulodunum. The new *colonia*, founded in AD 49, would accommodate a substitute garrison of combat-trained veterans, and provide a model of Roman society for the locals to emulate. Colchester was the first of four *coloniae* in Britain, the others being Lincoln, Gloucester and York; all except York were founded to house army veterans. Colchester is the only one for which we have a clear statement giving the reason for its foundation (Millett 1999, 193). Tacitus records, 'A colony was settled on conquered lands at Camulodunum by a strong detachment of veterans, who were to serve as a bulwark against revolt and to habituate the friendly natives to legal obligations' (*Annals* 12.32). This strategy allowed the Roman authorities to establish an infrastructure and settle veterans away from the more expensive land at the heart of the empire (Mann 1983, 61–2; Hopkins 1978). There is also some evidence that veterans found it hard to readjust to life in Italy and sometimes chose to move back to the provinces where they had served (Tacitus, *Annals* 14.27).

The *colonia* at Colchester would have been made up of veterans from the Roman legions active in the invasion; it would be an ethnically diverse group comprised of troops recruited from Italy, Spain, *Gallia Narbonensis* and perhaps the German frontier (Millett 1999, 195). The veterans would have been provided with land to support them in retirement, with those without senior rank or commercial skills becoming farmers. Colchester's status as a *colonia* placed it outside the settlement system of *civitates*, or tribal capitals, used by the Empire to integrate tribal networks into the Roman system. However, the continuity of native religious, burial and domestic activity at the Gosbecks, Stanway and Sheepen sites in the late 1st century AD shows that Colchester remained a tribal focus and did not simply become a Roman enclave. Undoubtedly the city would have had an extensive agricultural hinterland and would have itself been agricultural in character despite its rank, with orchards, allotments and market gardens taking up space within the *colonia*. It would have served as a regional market centre for farm produce as well as providing a home for urban bureaucrats, priests, smiths and traders.

In addition to becoming the province's senior *colonia*, the settlement also became the centre of the imperial cult in the province, with the construction of a massive Classical temple. The construction date for the temple and the implications of its presence for the political status of the city have been the subject of considerable discussion (Fishwick 1972, 1973, 1987, 1991, 1995 and 1997). The temple was dedicated to the Emperor Claudius and as emperors were not generally declared gods until after their death it is likely that the temple dates from AD 54, the year that Claudius died. Alternatively, the temple could represent a major break with tradition, it could be a provincial anomaly arising from

Britain's geographical isolation from Rome, or it could have been initiated by Claudius himself, with the intention of dedicating the building to Rome and Augustus, the last emperor to be deified.

In the absence of historical or epigraphic evidence any assessment of the political status of the settlement, beyond being the only *colonia* before the AD 90s, rests on the presence of the temple. Other imperial cult centres have been located in provincial capitals at, for example, Tàrraco (Tarragona, Spain) and Lugdunum (Lyons, France). If a direct parallel is drawn then Camulodunum would be a strong candidate not only for the provincial capital but as the seat of the provincial council, which was made up of representatives from the native elite (Hassall 1996, 19).

The conversion of the legionary fortress into a *colonia* involved the partial demolition and reuse of the military buildings, the slighting of the military defences and the addition of a realigned street grid, utilising the basic legionary orientation. The fortress annexe was extended to house the public buildings required by the new city. Evidence suggests that the early *colonia* flourished, which is unsurprising given that it would have become for a time a major bureaucratic and distribution hub for the new province. The buildings of the *colonia* were not grand, but were nevertheless well-built of wood and clay blocks with painted plaster and tiled roofs, although, interestingly, window glass appears to have been uncommon. The pragmatic reuse of barrack blocks suggests that wealth had not been showered on the veterans by the imperial authorities. Excavated workshops, warehouses, shops and domestic quarters show that the early *colonia* was a working city.

Those with access to land, markets or position appear to have fared well; luxury items like fine pottery and jewellery have been recovered in quantity from the *colonia* and the surrounding areas at Sheepen and Balkerne Hill. For the native Trinovantes the situation was apparently much bleaker. Writing about the tensions that led to the Boudican revolt in AD 60/1 Tacitus records, 'The settlers drove the Trinovantes from their homes and land, and called them prisoners and slaves. The troops encouraged the settlers' outrages, since their own way of behaving was the same and they looked forward to similar licence for themselves' (*Annals*, XIV, 32). However, it appears that not everybody was suffering equally; the presence of contemporary high-status native burials at Stanway contrasts starkly with both Tacitus's account and the cramped character of native-style huts at Sheepen. The accounts by Cassius Dio (*Historia Romana*, LXII, 83) and Tacitus (*Annals*, XIV, 31–2) suggest that sections of the native elite were co-opted into becoming priests of the Temple of Claudius in order to secure their status in the new provincial hierarchy. Subsequently they were forced to pay for the construction of the temple, either by taking out crippling loans or through the taxation of tribal networks. Ultimately, the resentment felt by the bulk of the Trinovantian population found an outlet in the Icenian revolt against Roman mistreatment. Overcoming any historic and cultural divisions between the two tribes, the Icenian leader Boudica was able to raise a large native army from the region and lead an earth-shaking revolt against Roman authority. The first major target was Colchester, where the city and its suburbs were laid waste and the population annihilated. The native host then turned its attention to London and St Albans before finally being defeated somewhere in the Midlands.

Past work

References to Roman Colchester are made by a number of Classical authors, including the geographer Ptolemy, the historians Cassius Dio, Tacitus and Suetonius, and Pliny the Elder, who wrote an encyclopaedia about the ancient world. These accounts stimulated antiquarian

interest in Colchester; in particular, the evocative account of the Boudican revolt provided by Tacitus has provided archaeologists with a framework for investigation into the early *colonia* period. From the time of William Stukeley (1687–1765) onwards, theories had been promulgated on the Roman origins of Colchester Castle, and in 1850 the Revd Henry Jenkins gave a lecture in which he suggested a Roman origin for the building (Jenkins 1851). However, the ensuing debate over the possible Roman or Norman origins of the superstructure directed attention away from what lay beneath (Cutts 1853; Jenkins 1869; Buckler 1876). In 1919 Mortimer Wheeler and Philip Laver made a breakthrough by recognising that the septaria vaults under the Norman castle were in fact the remains of a podium for the Temple of Claudius, as described by Tacitus (Fig 6.2). The identification of the temple subsequently enabled Wheeler to attempt a provisional street plan for the Roman city (Wheeler and Laver 1921, 147, fig 18; Wheeler 1920; 1923, 39).

Wheeler's first contribution to British archaeology was to excavate the Balcerne Gate at Colchester during World War I, continuing the work of Henry Laver and E N Mason, who had made a start in 1913. As a novice excavator, Wheeler can be forgiven for not identifying the traces of a monumental arch, possibly dating to the foundation of the *colonia*, which formed the core of the gateway (Fig 7.4). This was later identified by Philip Crummy following the Balcerne Lane excavations in 1973.

In 1927 excavations at Jacklin's Cafe on the site of the Cups Hotel, High Street by A F Hall, J T Jones and M J Pakenham revealed a Roman pottery shop that had apparently been burnt in the rebellion, vividly confirming the historical descriptions of the Boudican sacking of the town in the spring of AD 61 (although subsequently the dating has been questioned: *see* page 91). The results of more recent excavations have enabled the plotting of destruction deposits, creating a ghost image of the pre-Boudican town plan as it was in AD 60 (Dunnett 1966; CAR 6, 8).

Key to understanding the development of the early *colonia* was the confirmation that the city was built on the site of the legionary fortress and its annexe, which was confirmed by excavations at Lion Walk in 1971–4 and Culver Street in 1981–5. Even in 1980 it was still not certain if the dwarf wall structures recorded at Lion Walk, the Gilberd School on North Hill and St Mary's Rectory were part of the legionary fortress rather than the small early *colonia*, but the massive excavation at Culver Street confirmed that the legionary barracks had been converted for civilian use during the early years of the *colonia* (Fig 6.1; Crummy 1985, 78; Crummy 1999b, 89–100).

Outside the city, excavations at Sheepen in the 1930s and in 1970 demonstrated the continuity of settlement and manufacturing here from the military into the civilian period (Fig 4.9; Hawkes and Hull 1947; Niblett 1985). At Balcerne Lane a large area of ribbon development along the London road was excavated between 1973 and 1976 in advance of road building, revealing pre-Boudican industrial activity, strip houses and land plots (Fig 7.28). More recently, excavations at the Tarmac quarry pits at Stanway have demonstrated the continuity of elite burial practices into the pre-Boudican period (Fig 4.7), while, further west, excavations at Abbotstone investigated a Late Iron Age–early Roman farmstead (Brooks 1999a; Benfield and Brooks 1999).

In summary, 14 excavations from within the UAD study area can be identified as either revealing medium-sized to large areas of early *colonia* deposits or encountering deposits of particular significance. These are listed in Table 3. There have also been numerous smaller excavations, observations and watching briefs that produced evidence for this period.

The finds evidence

As stated in the previous chapter, because the buildings of the fortress were reused for the early *colonia*, not all contexts can be allocated with precision to one period or the other, and the finds from the two periods have sometimes been discussed together. Most of the general comments regarding the material culture of the fortress therefore also pertain here.

The early *colonia* provides evidence for an expanding range of imported objects and also for the development of new local industries (*CAR* 2; *CAR* 6, 140–244). Both factors suggest that, as the first capital of the new province, Colchester was initially poised to be a major entrepôt and manufacturing centre. That London proved to be better sited both for administrative purposes and for inter-provincial and intra-provincial trade, and therefore also for manufacturing, has undoubtedly affected the overall character of later Roman Colchester. However, in the decade before the Boudican revolt, some idea of how Colchester might have developed had it remained the capital can be guessed from its material culture. It was well placed for imports coming from Gaul and the Rhineland, such as Lyon ware, *terra sigillata* and other fine wares, *amphorae* containing wine, fish sauce or olives, *mortaria*, glassware, brooches, melon beads, lava querns and mirrors (*CAR* 10, 488–93; *CAR* 8, 225; *CAR* 2, 17, 30, 75–6; Lloyd-Morgan 1981, 10).

As the local clay was suitable for pottery production, imitations of continental wares and vessel types were made, such as colour-coated ware, Pompeian red ware, picture and open lamps (*CAR* 10, 492; *CAR* 2, 77–8; Eckardt 2002b). Items of copper alloy continued to be produced at Sheepen and at Culver Street in this period, and some of the Sheepen products were enamelled. A complete brass ingot and a bronze ingot fragment from Sheepen were interpreted at the time as imports, but in the light of the Period 1 and 2 fragments of a crucible for brass-making (as opposed to brass-melting) from Culver Street, a case can be made for local production from imported raw materials. Not all objects were made from freshly smelted metal, as scrap metal also appears to have been collected at Sheepen for reuse (Niblett 1985, 24–5; *CAR* 6, 194–7). Ironsmithing can be inferred from the presence of everyday tools and fittings, although physical evidence is rare, and the manufacture of tiles can also be posited despite no manufacturing site having been found. As with the fortress, many cold technologies that have left no archaeological trace can also be presumed to have taken place in the town or its suburbs, and in this respect the scarcity of waterlogged levels has undoubtedly affected the preservation of the material remains.

The Boudican burnt layer does not retain many large complete items and therefore is not as complete a picture of the material culture in use at the time of the destruction of the town as might have been expected, largely because of the clearance and rebuilding work that took place afterwards. Instead a small number of comparatively unusual items came from comparatively undisturbed contexts, such as a burnt bed with its furnishings found at Lion Walk, a steelyard with its scale pan found on a burnt floor at Balcerne Lane, some metal household equipment at the Gilbert School, charred grain, malted grain for brewing, flax seeds, a plum and some imported dates (*CAR* 2, fig 104, fig 147; *CAR* 3, 40, 42–7, 108; *CAR* 6, 330, 6.11–13). The most striking debris from the destruction came from shops selling pottery and glassware. In one of these the positions of the scorched ceramics (mainly samian ware) and largely melted glass vessels, showed that they were displayed or stored on shelving (Hull 1929; 1958, 153–8, 198–202; Millett 1987). The other again mainly sold samian ware, but also stocked a range of provisions that included some imports: charred lentils, figs, stone pine nuts, barley, spelt, horsebeans and coriander (Hull 1958, 198–202; Davies in archive). Both shops were situated on the main street of the *colonia*, while to the

north a large deposit of lamps and some moulds point to the site of a lamp workshop (Eckardt 2002b). Also to the north a building in *insula* 10 seems to have been used as a store; it produced many flagons, *amphorae* and unused *mortaria*, together with a quantity of carbonised wheat (VCH 1994, *Essex IX*, 13).

Although the imported fruit and vegetables mentioned above hint that the early colonists enjoyed a wide and varied diet, Cool has noted from *amphora* finds that after *c* AD 55 there may have been a slight decline in the consumption of fish sauce in the *colonia* compared to that of the fortress, and has suggested that this may show a decline in the economic wealth of the early colonists (2006, 77). An alternative interpretation, or the reason why a decline may have taken place, might be that the colonists' access to fish sauce was reduced as a direct effect of traders preferring to land their wares at London's port instead of continuing north to the river Colne.

A greater range of colours was used for plaster in the buildings of the early *colonia* than had been evident in the fortress; evidence for the use of Purbeck marble and other decorative stones became more abundant, and tiles used in cavity wall heating began to appear (Middleton *et al* 2006, 71; *CAR* 3, 28–9; *CAR* 6, 225–256). As well as new building techniques, a wide range of new dress accessories, other personalia, household equipment and votive items demonstrate the colony's access to new markets and also to the different styles of living and cultural practices of the colonists compared to those of the indigenous population. Differences between the pottery vessels used at Sheepen and in the *colonia* add to this distinction between the two groups (*CAR* 10, 488–93). At the same time, new developments in British-made and British-used products also appeared, pointing to a continuation of Late Iron Age material culture in innovative forms (for example: *CAR* 2, *passim*; *CAR* 6, *passim*; Cool 2006; Crummy 2006, 59; Eckardt and Crummy 2008, 69–72). Noteworthy items among the latter group are Colchester B derivative brooches and carinated strainer bowls, both probably made at Sheepen (Hawkes and Hull 1947, 310–11; Sealey 1999, 119–24; Crummy *et al* 2007, 324–5).

These cultural differences are also apparent in burials found to the west of the Roman town (Hull's western cemetery), which were chiefly excavated in the 19th century (*CAR* 9, 258–62). Although since then many of the grave groups have become muddled, one that can be restored with reasonable certainty is the so-called 'Child's Grave' cremation found in 1866. Dated from the coin evidence to between *c* AD 52–65, this burial is unique within Roman Britain for the range and quality of its grave goods, which included many pipeclay comic figurines, animal-shaped *unguentaria*, coins and decorated bone fragments from an ornate couch, as well as pottery, metal and glass vessels and other items (Eckardt 1999). This is clearly a continental Roman high-status burial that can be contrasted with the élite Late Iron Age burials at Stanway, several of which are only slightly earlier than the 'Child's Grave' and some of which may be contemporary with it (Crummy *et al* 2007, 440). The excavations at Handford House (Orr 2010) and the Garrison (CAT Report in prep.) have yet to be fully published, but both sites may include grave groups that belong within this period and, while less distinctive than those in the 'Child's Grave', would represent the material culture of the wider population of the *colonia*.

The archaeological evidence

by David Radford

The creation of the *colonia* and its hinterland

We learn from Tacitus (*Annals*, XIV, 31) that the aggressive seizure of native land holdings was a major contributing factor to the Boudican revolt. The *colonia* would have been granted an agricultural hinterland under its control, and within this territory (or *territorium*) land may have been centuriated, or divided up in a regular fashion, for allocation to retired veterans. However, cropmarks from around the town suggest irregularly planned fields and trackways evolving from the pre-Conquest landscape, rather than a regimented reallocation of land (Fig 3.2). Therefore the veteran land-grab may have involved expropriating going concerns from the local landowning class rather than centuriation (Esmonde Cleary 1987, 58). That this appropriation was piecemeal is suggested by the continuity of burial activities, and therefore land plots, at Stanway, and the survival of Gosbecks as a Romano-British religious centre into the Roman period (Crummy 1988a, 44). Both sites may have survived because Roman regulations for land confiscation encouraged respect for existing sacred places (Campbell 1996, 98). What we can say for certain is that land was seized for the laying-out of the *colonia*, for the burial plots and for external infrastructure, including roads, military structures, quarries and manufacturing zones. Agricultural land was also taken for the veterans, but there is no evidence as yet of centuriation at Colchester.

Evidence for centuriation is also absent from the other 1st-century *coloniae* at Gloucester (Hurst 1999, 127) and Lincoln (Jones 1999, 109). In fact, the north-western provinces as a whole look anomalous, as it has proved difficult to identify 1st-century centuriation in northern France, Belgium, the Netherlands, the Rhineland and Britain. Interestingly, where it has been identified at *Augusta Tricastinorum* in Gaul, the Roman plots are intermingled with holdings of the local tribe (Peterson 1997).

The size of the *territorium* surrounding Colchester is unknown. Estimates for land holdings have been made on the basis of legion size and standard plot allocation – for example, 37,750ha (or 377.5km²) by Sealey (2004, 16) – or alternatively by political parallel – for example, 400km² by Wachter (1998a, 61). Rodwell has attempted to use the Antonine Itinerary to define a ‘town zone’ around Colchester (Rodwell 1975, 79–83). It has also been proposed that the *colonia* could have been the focus for a major realignment of field boundaries in east Essex (Jones 1978, 23–5; Jones and Mattingly 1990, fig 5), but again this has yet to be proven (Going 1996, 100). There is no evidence for a large formal urban boundary like that suggested at Gloucester (Hurst 1999, 120, fig 120), although a perimeter ditch has been proposed west of the town (CAR 3, 13, fig 8).

Fortress into *colonia*: the revised layout

Much of the street grid of the fortress was retained and used as the core of the new grid of the *colonia* (Fig 6.1). Some streets were abandoned, others retained and widened, the whole process perhaps lasting several years. The essence of the new street layout was the retention of the *via principalis* and the north–south streets of the western half of the fortress, along with the western section of the *via sagularis*. The eastern side of the fortress grid was altered, with streets laid out running into the expanded military annexe, on a slightly different alignment to that of the fortress (Crummy 1982a, 125–34). The exceptions are the street north of *Insulae* 11, 12 and 13, which maintains the fortress alignment along with the later theatre in *Insula* 13, and the east–west street north of *Insula* 34, which follows the annexe alignment. The theatre’s alignment is interesting as it clearly sits over the line of the backfilled fortress ditch, yet maintains the legionary axis. The laying-out of a large precinct for the Temple of Claudius appears to have strongly influenced the street layout of the eastern part of the *colonia*, implying that the temple was constructed first and that the streets followed.

Within the fortress the *praetorium* and *principia* may have been demolished to make way for a new street laid between the ends of the *via decumana* and the *via praetoria* to form an unbroken *decumanus maximus* for the town (CAR 3, 8). This interpretation rests on observation of street metalling on the site of the probable *praetorium* (Dunnett 1971a, fig 3). Some military buildings were demolished in the western part of the fortress to make way for new east–west streets that kept the fortress alignment (MON271; CAR 6, 133–5). The new streets were not necessarily of high quality: for example, a stretch at Culver Street was initially unmetalled and found to be overlaid with silt and occupation debris. Here pits were dug into one of the footways as well as the street surface itself, suggesting a rather low level of civic maintenance during the initial stages of the *colonia*. The street was eventually metalled at some point before the revolt (CAR 3, 8–9; CAR 6, 27).

The size of the area laid out to the east and north of the fortress remains unclear. The apparent absence of Boudican destruction deposits north, east and south-east of *Insulae* 22 and 30 has been used to provide a rough boundary (Fig 6.1). However, burnt deposits were noted below the ‘Wheeler Houses’ in Castle Park (*Insula* 6) and beneath the street separating *Insulae* 6 and 14, where a burnt layer of wood approximately 3in (7.5cm) thick was recorded (Wheeler 1921, 17). Furthermore, at 21–31 Long Wyre Street, Boudican debris was recorded at several places at the southern end of *Insula* 37 (Fig 7.1; Brooks 1997b). At present it is not clear whether these structures were part of the early *colonia* or part of a suburban settlement serving it.

Defences

Tacitus records that the town was left undefended because priority had been given to civil amenities. Archaeological evidence confirms this, demonstrating that the fortress ditch was infilled at some point during the construction of the *colonia*. The fortress ditch (Fig 5.1; MON386) was revealed during the excavation of the Lion Walk United Reformed Church in 1984. Here the stratigraphical relationships suggested that the ditch was infilled between AD 50 and 55 (CAR 6, 381). Evidence from excavations at Balcerne Lane suggests that there was a delay between the departure of the garrison and the slighting of the ditch to allow for the construction of the new street grid. Here the legionary ditch became a dumping place for metalworking debris and was encroached upon by pits and a building, something that a military commander would surely not have allowed. In addition, buildings at Balcerne Lane (Fig 6.1; MON405–7) and Lion Walk (Fig 7.13; MON471) that were burnt in the revolt, appear to have sat over the backfilled fortress ditch. The legionary defences appear to have been slighted on all sides, even though the street grid was expanded only north and eastwards.

Buildings of the *colonia*

Many military buildings were converted for civilian use and the legionary annexe was expanded and used to house the public buildings required by the province’s senior city (Fig 6.1). The new *colonia* was predominantly a city of wood, wattle and daub. The lack of local building stone must have inflated the price of this resource, although even at a provincial level stone was generally restricted to major public buildings during the 1st and early 2nd centuries (Fulford 1989, 182–3). The current evidence suggests that the earliest public buildings in Colchester were constructed in wood and daub, with the notable exception of the Temple of Claudius, perhaps the monumental arch at Balcerne Gate and perhaps an as yet unlocated bathhouse. The temple was clearly an exceptional building and its monumental scale must have drained resources from the local community, perhaps helping

to explain the apparent absence of other early public buildings in stone. By the time of the revolt the town was well developed, with domestic, commercial and industrial buildings filling the *insulae* of the west and central street grid. These were generally simple but well constructed, using a variety of foundation and structural techniques. However, the notable dearth of window glass from Boudican layers confirms a modest assessment of building quality (CAR 6, 117–18). Over time the infrastructure was steadily improved; the streets were metalled and a piped water system was installed and renewed. The city was clearly flourishing when disaster struck.

Reuse of barracks

Each legionary barrack block was subdivided into a long, narrow blockhouse for the soldiers and an apartment for the centurion. The centurion's quarters often fronted major streets and were divided internally into small rooms, making them more attractive for reuse. The legionaries' rooms (*contubernia*) were less desirable, being a series of small independent compartments, and so were either demolished or heavily renovated. At Lion Walk four reused barrack blocks were excavated (CAR 3, 37–40). The burnt centurion's quarters of one barracks (MON464) displayed no new structural phases, suggesting its reuse without alteration. By contrast, another centurion's quarters (MON465) was substantially altered for civilian use; new floors were made from the debris of demolished barrack walls and new partition walls were laid out on timber ground plates. Investigation of another barrack block (MON466) demonstrated that the *contubernia* had been demolished before the revolt, although at least part of the *contubernia* of a further block (MON467) survived until it was destroyed in the fire (Fig 7.13; *ibid*, 37–40).

At Culver Street (1981/2–1984/5), six reused barracks were excavated and, although some new floors and walls of stud and wattle or daub block were added, the internal layouts were little changed from those of the military period. In one case (MON522), part of the *contubernia* wall survived to a height of 35cm and consisted of vertical studs with an infilling of solid daub. The building contained an unusual raised hearth and a latrine pit that had continued in use from the fortress period. Three rooms in the centurion's quarters revealed traces of a wooden floor and one contained rather rough and unpainted wall plaster. In another barrack block (MON523) the centurion's quarters had been refloored three times before the revolt. At least one new stud and wattle internal partition wall had been added, which survived to a height of 50cm and retained well-preserved impressions of wattles interwoven with horizontal wooden studs. Another barrack block (MON524) revealed a detailed floor plan showing that the military rooms had been amalgamated and refloored. The three other barrack blocks (MON525–6, MON529) were poorly preserved, but in one (MON526), the eastern *contubernia* had apparently been subdivided into pairs of rooms, one of which appeared to have a veranda facing onto the street with an external hearth (Fig 7.10).

Another *contubernia* was excavated at the Gilberd School (Fig 6.1; MON267) and consisted of at least four rooms which had survived until the revolt and four rooms which had been demolished prior to the revolt to make way for a new building (MON271; CAR 6, 127–39).

Four rooms of another probable barrack block (MON733) were excavated at St Mary's Rectory in 1967 (Dunnett 1971a, 65–6). Here the primary walls, of either timber or clay blocks, rested on mortared plinths, with a less substantial wall resting on timber sleepers. The floors were of trampled clay that had all been renewed at least once. The floor debris contained pieces of red-painted wall plaster, burnt daub and roof tile. Beyond the southern

wall was a gravelled surface, perhaps an external yard or alley. A second building (MON734) also appeared to be a reused barracks or military building. It consisted of a plinth wall and clay floor, and was on a different alignment to the previous building (Fig 5.1; *ibid*, 66).

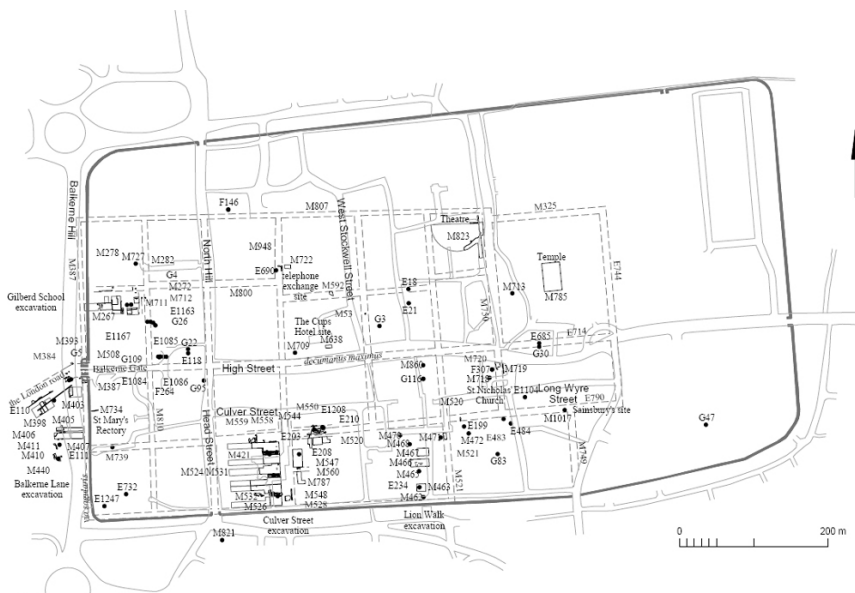


Fig 6.1

Fig 6.1 The early colonia and its eastward extension showing distribution of find spots, monuments and significant elements.

An interesting structure (MON816) of possible military origin was excavated on the site of the NCP car park at Nunn's Road in 1965 (Fig 5.1; Dunnett 1967, 27–33). The building appeared to be a store or depot for the early *colonia* which had been burnt in the revolt. Its plan indicated that it had some kind of administrative or commercial function (*see below*). The walls were built mostly from unbaked clay blocks which had been plastered and painted, with internal walls of wattle and daub. Where the walls crossed the slope of the hill they rested on mortared plinths, whereas the north–south walls rested on spreads of gravel and pebbles and, in one case, pieces of brushwood. Internal partition walls were less substantial and built of wattle and daub. The floors were mainly of trampled clay and all of them had been renewed at least once.

New timber structures in the early colonia

Some buildings appear to be either civilian in origin or to have reused only small parts of military buildings. Over 20 early *colonia* buildings have been identified, at least five of which incorporated mortared plinth foundations, although these need not have all been of military origin. Timber ground plates were the favoured foundation type of this period, and were evidently considered sufficient support given the load-bearing qualities of the geology. Walls were generally of wattle and daub, stud and wattle or daub block, and different techniques were often incorporated into one building (Fig 5.3).

In the 1960s a number of pre-Boudican timber buildings were recorded. At the Telephone Exchange site in 1966 traces of wattle and daub walls resting on timber ground

plates were noted (Fig 6.1; MON722; Dunnett 1971a, 12). At St Mary's Rectory in 1967 investigations discovered two wooden buildings (Fig 6.1; MON733–4) that had been burnt and were either military in origin or had reused military mortared plinth walls. At the Sainsbury's site in 1968 burnt daub and clay blocks (Fig 6.1; MON1017) were noted in the area of the legionary annexe. The absence of associated roofing tile was suggested as evidence that the building or buildings were unfinished at the time of the revolt, although it is possible that the buildings had been given timber or shingle roofs which left no trace (ibid, 98–100). Traces of another wooden building in the annexe, on the same alignment as the temple precinct and perhaps belonging to the *colonia*, were noted in 1964 (Fig 6.1; ELM685; Hebditch 1971, 117).



Fig 6.2 The 'vaults' or foundations of the Temple of Claudius as these appear today; the sand, which originally filled the void was dug out in the late 17th century (Colchester Museums).

A far more impressive town house from the early *colonia* was recorded in plan at the Lion Walk site in 1971–4 (Fig 7.13; MON470). Here three ranges of rooms were set out around a gravel yard bounded by a series of oak-lined drains (CAR 3, 40–9). The walls were supported on wooden ground plates, although one that rested on a mortared plinth appeared to be civilian in origin. It has been suggested that the style of the building may have been inspired by military craftsmen and introduced into civilian provincial usage by colonists at Colchester (Blagg 1990, 204). Most of the walls were of stud and wattle, but three walls were of daub blocks and perhaps represented a separate building. The bases of several of the walls had wall plaster preserved *in situ*, which was painted with high-quality imitation marble designs, some of which had previously been recorded only in Flavian and Trajanic contexts (CAR 3, 42). Other finds included keyed daub, roof tiles and the burnt remains of a bed or couch (ibid, 23; Wild 1984, 44–6). The construction techniques used in this building are similar to those used on the period I building in *Insula XIV* at Verulamium (Frere 1972, 11).

At the Cups Hotel site in 1973–4, three rooms of a pre-Boudican building (Fig 6.1; MON638) were identified; they consisted of timber-framed walls placed on timber ground plates, with one wall placed on a mortar and tile plinth. Two of the rooms were semi-

basements: one contained patches of charcoal, indicating that it had a timber plank floor, while the other had a sandy clay floor on which burnt cereals were found. A third room was not sunken and had a sandy clay floor which contained traces of burnt flax (CAR 6, 330–3).

At Culver Street in 1981 (Site E) a series of five small badly preserved early *colonia* timber-framed houses were identified fronting an east–west street (Fig 6.1; MON542–6; CAR 6, 57–9). All had daub floors and walls of unknown construction set on single timber ground plates; some had hearths and drainage gullies. One (MON545) had at least six rooms and many hearths which survived only as burnt patches on the floor and included fragments of possible brass-making crucible. Elsewhere at Culver Street two other possible pre-revolt buildings were recovered: one (MON547) had a daub floor and an oven; the other (MON548) was recorded only as postholes, slots and hearths (ibid, 59).

Excavations at the Gilberd School in 1984–5 revealed a substantial timber-framed building (Fig 6.1; MON271) built on a terrace cut through the central part of a barrack block (MON267), placing it level with a new street from the early *colonia* (MON278). It measured 12.5m wide and 18.75m long, and may have extended south for a further 5.5m. The timber-framed walls were supported on piles; other daub block walls were supported on timber ground plates. The building was divided into two parallel rows of rooms of different widths which were separated by internal walls, either set within slots or of stake-and-wattle construction. The floors were of sandy clay with occupation debris, roof tiles and quantities of burnt daub in evidence. A possible veranda or colonnade was identified along the northern frontage. One room contained a large north–south gully with a timber cover; another had a large gully, which had probably contained a timber drain, discharging from the west side of the building (CAR 6, 133–4).

Of the other early *colonia* buildings recorded at the Gilberd School, one (MON283) had foundations comprising a reused military mortared plinth wall and timber ground plates. The sandy clay floor was sealed by an occupation layer which produced traces of hay. Another (MON282) was a small rectangular timber-framed building built on timber ground-plates lying over an earlier barrack block. Another building (MON284) survived only as a series of shallow slots (CAR 6, 134–5).

Ribbon settlement along the London road

Excavations west of the Balcerne Gate have revealed traces of roadside settlement running alongside the London road. In 1973–6 there were uncovered a series of slight industrial buildings dated to AD 44–55, with the best-defined building located to the south of the road (MON393). An early phase consisted of an area of decayed wattles and stakeholes, which was later demolished and replaced by another wattle and daub structure set in slots in the ground with a daub floor. Features included a possible forging hearth located in a patch of sand. The building encroached onto the military street, and nearby pits were cut into the fortress ditch, suggesting that the establishment dated to the period after the legionary garrison had left. Three other possible buildings (Fig 5.1; MON390–2) were suggested by spreads of slots, postholes and small pits. These appeared to have a spatial and functional relationship with building MON393 (Fig 6.1; CAR 3, 101–2). North of the London road at least one building (MON394) was noted, again consisting of decayed wattles and stakeholes and producing finds of slag, including hammerscale, and also ox scapulae (ibid, 93–102).

At some point before the Boudican revolt the industrial workshops were demolished and ironworking ceased in this area. New buildings were laid out along the London road, orientated north–south, and others, orientated east–west, fronted the *via sagularis* of the old

fortress and encroached over the infilled legionary ditch. The new buildings were more substantial than previous ones and were set out in distinct land plots. Two water mains served the building along the south side of the London road, which was resurfaced at least once before the revolt (ibid, fig 90). Four buildings to the south of the London road were of similar construction, with floors of daub and walls of stud and wattle or daub blocks set upon wooden ground plates (Fig 6.1; MON398, MON401–3). They were narrow structures up to 40m long without side alleys, described by the excavator as strip houses (ibid, 103–5). One building (MON398) incorporated an internal passage down the east side and a small room about 3m square. Another (MON402) contained a quantity of charred cereals (ibid, 105). To the east of this structure were an oven and a large shallow plank-lined pit belonging to another structure (MON404).

The same excavation partially examined three or more narrow strip houses which were located south of the London road, faced east–west and fronted onto the former *via sagularis*. The walls of one building (MON405) were mostly of stake-and-wattle type, with the exception of one post-in-trench construction. Internal features included daub floors, two ovens and a hearth. A gravelled area to the north of building MON405 was probably a yard. Another building (MON406) consisted of six or seven rooms laid out in two ranges side by side. Part of one room (Room 1) was excavated: features included a small oven and a daub floor. The walls were mainly of stake-and-wattle, the exceptions being a collapsed daub wall reinforced with tile fragments and a wall constructed of posts set into a single trench. Another room (Room 6) contained deposits of burnt cereals and many fragments of burnt timber; the excavator speculated that this building may have served as a granary of two storeys. A third building (MON407) revealed walls of stake and wattle, daub floors, a hearth and an external yard (Fig 6.1).

The buildings outside the Balcerne Gate appear to be the working and living quarters of non-citizens who made a living servicing the needs of veteran families within the *colonia*. This was a Romanised community living in strip house forms that appear to owe little to native influence. The settlement can be contrasted with the Newgate Street site at London, where traditional Iron Age roundhouses are found alongside Roman rectangular forms (Perring *et al* 1991, fig 7). The limits of suburban settlement west of the town during the early *colonia* period are not known, but patches of Boudican destruction layers recorded at St Mary's Hospital in 1997 (Brooks 1997a, 18; interim note in *Britannia* XXIX (1998): 407) and at Manor Road in 1985 (CAT Report 11/85a) suggest that settlement already stretched well to the north and south of the main road from the Balcerne Gate.

The development of the eastern annexe

At 21–31 Long Wyre Street the discovery of a clay-floored building, evidently burnt in the revolt, indicates that buildings occupied the southern end of the later *Insula* 37 at this time, although it remains to be seen if these were part of an expanding annexe or external to it. A mid-1st-century hanging lamp from the destruction layer of the building could suggest that the occupants were relatively affluent (Crummy 2001a, 33). Elsewhere, Claudian and Flavian pottery has been recovered in *Insula* 23 (CMR 1954–56, 18–19) and *Insula* 39 (Richardson 1961, 7–8), raising the question of whether these areas were already developed by the time of the revolt or were just used as a dump.

Structures at Sheepen

During the years of the early *colonia* native-type structures continued to be maintained and replaced at Sheepen. These were small and of the same circular and sub-rectangular plan as

the pre-Conquest and fortress-period huts (see Chapters 4 and 5). They were of rudimentary construction, with clay (sometimes sunken) floors. Around 32 huts from this period were identified by Hawkes and Hull in the 1930s: 18 entirely new, 3 rebuilt, 11 surviving from the fortress period and one large hut surviving from the pre-Conquest period. These appear to have been burnt along with the rest of the settlement during the Boudican revolt. The only evolutions in building design noted were – in certain instances – the addition of postholes for more secure roof support and the increased frequency and thickness of clay floors and clay wall banks (Hawkes and Hull 1947, 53–4).

Sheepen continued to be a manufacturing and trading centre during the construction of the *colonia*. The road across Sheepen Hill was the focus of a number of Roman structures and metalworking sites, interspersed with native-style huts. A distinctive Roman building (Fig 4.9; MON429) was excavated close to the trackway (Site A1). It was Claudian in origin and oblong in form, measuring 24m in length, and was comprised of timber posts with wattle and daub walls bedded in slots. A complex of subdivisions existed at its west end while the main body of the building was aisled, leading the excavators to compare it with barrack block-type structures (Hawkes and Hull 1947, 90). It evidently survived until the revolt, when it was burnt down.

Hawkes and Hull believed that a native underclass served the new occupants at Sheepen, their social status exemplified by the smallness of the best-preserved native-style hut (ELM116). This was situated just north of the road, close to a Roman building, and comprised a circular clay floor only 2.4m across, with six evenly spaced stakeholes for the superstructure and the remnants of a clay wall on the eastern side (Hawkes and Hull 1947, 91).

During the 1930s, excavation trenches were opened at the top, middle and bottom of Sheepen Hill, all of which revealed traces of pre-revolt occupation. Direct continuity of occupation sites from the fortress period was recorded only at the bottom of the hill (Region 1), where there was also evidence of gravel surfacing and metalworking. Midway up the hill, adjacent to the road, new structures were built close to previous occupation sites; again, metalworking debris was present. At the top of the hill the excavators recorded traces of occupation from this period, although the remains, including hearths, postholes and metal surfaces, were disturbed and ephemeral.

The 1970s excavations uncovered other Roman timber buildings, dated to the late Neronian period, next to the roadway. One structure (Fig 4.9; MON687) rested on beam slots dug into levelled dump material, with patches of burnt daub and a length of burnt clay wall surviving to a height of 0.35m. Finds included a fragment of roller-stamped daub, domestic items and military equipment (Niblett 1985, 19). Another (Fig 4.9; ELM123) was bounded by beam-gullies and postholes and stretched for at least 18m parallel to the road. It was a narrow, aisled, bipartite structure which preserved remnants of a clay floor with a pebbled surface (Hawkes and Hull 1947, 104). Nearby, part of a timber-lined cellar (Fig 4.9; MON685) had a gravel entrance ramp. The burnt remains of supporting posts, daub and patterned plaster were also found (*ibid.*, 9–12). The eastern extent of the Sheepen settlement appears to have stretched as far as the current Colchester Institute site, where stratified Roman building material associated with pottery dated to *c.* AD 5–60 (FND295) has been recovered close to the site of native-style structures recorded in the 1930s (Crossan 2000b; Hawkes and Hull 1947, 103).

Public buildings

To date only the Temple of Claudius and two timber and daub structures nearby to the

south of the temple in *Insulae* 29 and 30 have been identified as probable public buildings from this period. No bathhouse, early theatre, forum or basilica have been securely located for the early *colonia* period, although each has a suggested position in the *colonia*. A number of undated buildings of monumental size have been recorded and are dealt with in the next chapter. Philip Crummy has suggested that the volume of broken (and therefore presumably reused) brick in the later town wall derives from the remains of several substantial public buildings that stood before the revolt (Crummy 2002a, 19–21).

Temples

Tacitus records that the citizens of Colchester made a last stand in the Temple of Claudius, holding out for two days before meeting their end. Excavations on the site have not produced evidence of destruction debris or burnt layers, suggesting perhaps that the site was ritually cleansed after the revolt. The temple was constructed on a massive podium built of septaria and tile which rested on sand-filled vaults to minimise the amount of building stone required (Fig 6.2). No direct dating evidence has been found for the podium, but it is likely to be pre-Boudican simply because it does not appear to contain reused material (Wheeler and Laver 1921, 146). A study of the mortar from the base of the podium indicated that the lime/aggregate ratio was far too low, perhaps suggesting that the workmanship was incompetent or hurried (Carter 1969, 21–2). The Temple of Claudius is considered further below (see page 142)

One of the temples excavated in 1959 to the north of St Helena School (MON770) was found to overlie the remains of an earlier burnt building (MON 771), possibly a wooden temple destroyed in the revolt (Blake 1959b, 37; Crummy 1980a, 252–6). This comprised a series of clay floors, wall footings and postholes which were contemporary with nearby kilns producing imitation Gallo-Belgic ware (interim report in *J Roman Stud* 51 (1961): 185; Crummy 1980a, 252–6; Swan 1984, mf287). Another Romano-Celtic temple (MON795) excavated at the Royal Grammar School may have had a timber precursor, but there was no dating evidence to place it before the revolt (Hull 1958, 236–40).

Unidentified buildings, Insulae 29 and 30

In 1955–6 excavations on the site of St Nicholas's Church in *Insula* 29 revealed a large building (Fig 6.1; MON718) of clay block construction which had been destroyed during the revolt. The absence of domestic pottery and the scale and uniformity of the building led the excavator to suggest a public function, although a bathhouse was ruled out because no drain or hypocausted remains were noted. Quantities of broken plaster from fluted columns, painted wall plaster, burnt bronzework fittings and roof tiles, all lying over a burnt timber floor, were recovered (Hull 1960, 310). The same excavation encountered another building (Fig 6.1; MON719) in *Insula* 30. Again, the remains took the form of burnt clay blocks which were reinforced by horizontal timbers. Fragments of plaster from fluted columns were recovered and the pottery suggested a Claudian, and therefore military, origin for the building (ibid, 310, 316). Its proximity to the Temple of Claudius has led to suggestions that it served an administrative function for the imperial cult. In the same *insula* building work on the south side of Culver Street in 1948 revealed a sequence of deposits identified as five clay block or wattle and daub buildings, the lowest of which was dated by Claudian–Neronian samian (ibid, 317).

Principia/forum

The *colonia's* forum has yet to be securely located, although comparisons with other towns

would suggest that this lies on the site of the former fortress *principia*, perhaps in *Insula* 18 (Wacher 1998a, 73). A similarity can be noted between British forum designs and certain military *principia* (Brigham 1992, 106), and the *insula* is certainly big enough to house such a structure, judging by other provincial fora. In 1965 excavations at the Nunn's Road NCP car park uncovered part of an undated monumental stone building (Fig 7.2; MON819) in the northern part of *Insula* 18 (Dunnett 1967, 36–8). Furthermore, a mortared septaria wall 70cm wide was noted at the southern edge of the *insula* in 1998 (ELM1016; Crossan 1998a). It is therefore possible that an early stone forum, or alternatively a wooden structure like examples at Silchester, Exeter and possibly Lincoln, may yet emerge from this *insula* (Wacher 1995, 43). Two other possible forum sites have been suggested: the large undated structure in *Insula* 20 (Fig 7.2; MON47) and the building noted on the St Nicholas's Church site south of the Temple of Claudius (Fig 6.1; MON719; Hull 1960, 301–28).

Theatre and bathhouse

Tacitus mentions a theatre in his account of the Boudican revolt, but there is as yet no archaeological evidence to confirm the existence of such a structure during this period. A wooden theatre may have stood on the site of the later stone theatre in Maidenburgh Street, although an exploratory excavation in 1981 failed to produce any evidence (Crummy 1982b, 299–303). The strongest evidence for the location of an earlier theatre on this site is the orientation of the later theatre, which is aligned with the fortress street grid, rather than the realigned grid of the *colonia* (Fig 6.1).

The site of the city's public baths has yet to be identified, although a good case can be made for *Insula* 38a, where in 1848 William Wire mapped 'three hypocaust arched fireplaces' along the east side of Long Wyre Street (Wire nd, 23.8.1848). Wire also recovered a number of box flue tiles from the site, which have survived in Colchester Museums' collections and appear to be 1st century in date (Black 1992, 120–3). Nearby, a stack of *pila* tiles was found in a room under the east gutter of Wyre Street in 1929, and during the 1950s several pieces of 'Roman' lead piping, including an angle joint, were found in Long Wyre Street by H C Calver (Hull 1958, 214; CMR 1957–1962, 31). Another possible location for the baths is *Insula* 30, where the base of a massive suspended *opus signinum* floor was recorded in 1983 during excavations at 61–62 High Street (CAR 6, 995). Just to the south of this site, excavations at 7–15 Long Wyre Street in 1978–9 uncovered a large well-built wooden drain and an adjacent water pipe running north towards *Insulae* 29 and 30. The features were dated to c AD 49–70 (ibid, 355–65). A third possible location is *Insula* 20, where excavations at the Vineyard Press site in 1990 revealed part of the foundations of a public building (MON47) containing a large drain (Benfield and Garrod 1992, 25–38).

Monumental arch

Excavations in 1913 and 1917 revealed a pair of joined monumental archways at the Balcerne Gate (Wheeler 1921). At the time these were interpreted as part of the later western gate, but in 1973 the site was re-examined and the archways were identified as part of a freestanding monumental arch similar to those recorded at Verulamium. The arches were later incorporated into a larger gateway forming part of the city wall (CAR 3, 122). In 1975 the eastern end of the southern monumental arch was examined (Crummy 1977a, 93–4). Unfortunately no convincing dating evidence has been recovered, but it seems likely that the arches were constructed to commemorate either the foundation of the *colonia* or its refoundation after the revolt (Crummy 2001, 61; Esmonde Cleary 1987, 47).

Water supply and drains

The early *colonia* appears to have been provided with a pressurised water and drainage system from its inception, although the source of the water remains unclear. Only fragments of the early water supply and waste disposal system have been recovered. Excavations at 7–15 Long Wyre Street in 1978–9 revealed a timber drain (Fig 6.1; ELM483) dated to c AD 49–75 running down the hill and cutting the demolished remains of the military annexe rampart. It was more substantial than other timber drains excavated previously, being of four-sided box construction, 75cm square with an iron collar (for other examples of this type see CAR 3, 26). At the same site an early water main (Fig 6.1; ELM484) ran parallel to the drain in the direction of public buildings to the north. A water tank and pipe on the site, dating to the later *colonia*, suggests that the location was related to water supply for a long period (CAR 6, 356). To the south of the precinct of the Temple of Claudius, behind the High Street, evidence has been found of several drains aligned east–west; the earliest were probably timber-lined, later to be replaced by a stone-lined drain and then one constructed of brick set in *opus signinum*. This brick drain was traced for over 7.4m in 2006 (Shimmin 2008b). Elsewhere at North Hill, the store house (Fig 7.2; MON816), later destroyed in the revolt, had an internal water pipe with an iron collar (Dunnett 1967, 27–33). Evidence for water supply outside the *colonia* consists of a wooden water main (Fig 7.28; ELM109 and ELM 110) with iron collars which runs along the southern side of the London road and dates to before the revolt (Crummy 1977a, fig 11; CAR 3, 115).

Manufacturing and trade

The colonia

Within the city, buildings have been identified with manufacturing, retail and storage functions. Manufacturing within the *colonia* included metalworking, lamp-making and no doubt many other activities. At Culver Street, a building (MON545) contained as many as 15 internal hearths, which were probably related to industrial activity of some sort, including the production of brass (CAR 6, 57–8, 196 and table 5.2).

Excavations at Balcerne Gardens produced three tiled ovens or furnaces and a quantity of iron slag; no evidence for Boudican destruction was noted but the pottery recovered was pre-Flavian (Dunnett 1971a, 52–3). At the Gilberd School a small rectangular timber-framed building (Fig 6.1; MON282) contained a copper-alloy bowl, a *patera* handle and a copper-alloy dish or scale pan; the small size and plan of the building suggested that it was not simply domestic in function (CAR 6, 134–5). In 1964 a number of pre-Flavian clay lamps and lamp moulds were recovered from a contractor's trench in part of the Telephone Manager's Site, West Stockwell Street (*Insula* 11) (Eckardt 2002a). The moulds, which are unique finds in Roman Britain, suggest that a lamp workshop existed in the vicinity (Dunnett 1967, 27). In 1966 fragments of lamps and mould were recovered from Boudican destruction layers in a room just to the south of the 1964 discovery, at the Telephone Exchange Site (Fig 6.1; MON722) (Dunnett 1971a, 33–5).

Evidence for weaving comes from a building at Culver Street (Fig 7.10; MON522) where several perforated fired clay objects, which may have been loomweights, were found in one room. Evidence for brewing comes from a reused barrack block, also at Culver Street (Fig 7.10; MON524) where carbonised grain and barley had sprouted, possibly deliberately as malt for brewing. Two pottery shops have been identified, both sited on the main east–west street of the town. The first, or Pottery Shop I, was encountered during excavations for the foundations of 'Jacklin's Cafe' on the site of the Cups Hotel in 1927 (Fig 6.1; MON709;

Hull 1958, 152–8). A small excavation for an adjacent garage in 1929 subsequently produced large quantities of samian ware and glass of thin coloured type, representing thousands of imported vessels from what must have been a pottery and glassware shop. More samian from residual contexts was recovered from an excavation in 1997 (Benfield 1998a). Little is known about the superstructure of Pottery Shop I, but it appears to have been a small wooden building with pottery stacked up against one wall. A re-examination of the pottery has suggested that it may have been destroyed during an earlier fire of c AD 50–5 rather than during the Boudican revolt (Millett 1987, 106). A second shop, or Pottery Shop II, was found in 1927 at 45–46 High Street; here much burnt samian pottery was recovered, the shop apparently having been destroyed in the revolt (Fig 6.1; MON860; Hull 1958, 198–202). The site was re-excavated in 1971, when traces of foodstuffs were also noted by Peter Murphy (pers comm).

A building (Fig 5.1; MON816) excavated on the site of the NCP car park at Nunn's Road has already been mentioned. Some of the rooms appear to have been used for storage, as finds included large quantities of carbonised wheat, bronze scales, flagons, mortaria and around 20 smashed *amphorae*. These had been filled mostly with olive oil and were of Spanish origin, Spain being a major supplier to the Colchester market at this period (Sealey 2004, 23; Fulford 1989, 178, fig 1).

Outside the colonia

During the early years of the *colonia* the Sheepen site continued to be a focal point for trade and manufacturing, with industrial compounds arranged alongside native, and perhaps immigrant, occupation sites. In the early Neronian period, the north side of the metalled trackway over Sheepen Hill was occupied by a blacksmith's workshop; a nearby rubbish dump produced quantities of iron slag, copper-alloy flecks and domestic refuse (Fig 4.9). Waste products from this area included lead and copper-alloy scrap, iron slag, tile and pottery wasters, crucibles and mould fragments. Remnants of the bases of ironsmithing furnaces were also found, one of which incorporated a tuyère – a nozzle for forcing air into a furnace. An early ditch running along the centre of the metalled track could have been either a drainage ditch or a leat bringing water for the metalworking process (Niblett 1985, 25).

One pit at Sheepen produced a large sheet of high-grade brass, suggesting the manipulation of imported raw materials as well as scrap (Musty 1975, 409–11; Niblett 1985, 113). In addition, a large number of complete, mostly brass, brooches were recovered from the 1970 excavation and this, combined with traces of brass found on crucible and mould fragments, suggests brooch manufacture on the site (Niblett 1985, 113). Other manufacturing processes that have left traces include enamelling, possibly representing the continuity of a native tradition, and leatherworking (Hawkes and Hull 1947, 54; Niblett 1985, 25). Fewer cattle bones were recovered at Sheepen from the early *colonia* period than from previous periods, and there was less worked bone. However, the Roman cellar (Fig 4.9; MON685) produced a fine bronze stamp decorated with a circle of six animals chasing each other, which has been identified as a stamp for embossing leather (Crummy 2001, 15–16).

The finds assemblage from Sheepen suggests that the area supported workshops supplying the domestic and perhaps military requirements of the developing *colonia*. The volume of metalwork from rubbish dumps, however, is not matched by direct evidence for manufacture, and caution is required. Hawkes and Hull believed that metalworking, both of copper alloys and iron, flourished in this period, but Niblett is more circumspect (Niblett 1985, 112–13). Evidence has been recovered for the smithing of iron and copper alloys, but

not for the smelting of iron and copper, with the exception of a lump of metallic iron cake (Niblett 1985, M3:E8, 113). Copper-alloy objects recovered include domestic articles, brooches, chatelaines and numerous fittings for boxes, carts or furniture, as well as large quantities of broken military equipment, including buckles, cuirass hinges, shield bindings and helmet fittings. The site has also yielded a stamped bronze ingot and a bronze die, apparently for stamping moulds for decorated *phaleræ*, or harness decorations. The large quantities of military material recovered in the 1930s led Hawkes and Hull to suggest that a hasty rearmament programme had been undertaken prior to the revolt (Hawkes and Hull 1947, 53–6, 91–3). Hawkes later accepted that the material was more likely to be representative of ongoing arms manufacture (Fitzpatrick 1986, 37–8; CAR 11, 68), although it could simply be scrap for low-grade reuse (Niblett 1985, 113). Nearby, at Balcerne Lane, a series of slight industrial buildings dating to the early *colonia* was found lining the London road. The structures were linked with sand and charcoal debris containing much slag, including hammerscale, suggesting ironworking, and one (Fig 6.1; MON393) included a possible forging hearth (CAR 3, 93–102). At some point before the Boudican revolt these industrial workshops were demolished and ironworking ceased in this area.

Five, or possibly six, pottery kilns of probable early colonial date have been recovered from outside the *colonia*. One (MON920) was found on the east side of region 4 at Sheepen Area L (Hawkes and Hull 1947, 105–7, 282–4; Hull 1963, 147–8). A second (MON847) was found on the playing field of the nearby Endsleigh School; here several fragments of human skull were found in the kiln, perhaps representing victims of the revolt (ibid, 90–2; 157–61; Sealey 2004, 26). Two more (MON777–8) near the river Colne at Sheepen were cut by the *temenos* wall of two later temples and apparently produced imitation Gallo-Belgic ware until the revolt (interim report in J Roman Stud 51 (1961): 185, pl 16; Swan 1984, mf287). Other pre-Flavian wasters and a probable kiln (MON775) were observed by workmen at the Colne river crossing (CAR 6, 366–7). Elsewhere at Sheepen, a single rubbish pit produced at least 34 examples of the distinctive pottery *Cam.* 154, probably from a nearby kiln (MON920; Niblett 1985, 25, fig 30, 192).

Of these kilns, four are rectangular in shape and one circular; both designs are well represented at the site of Novaesium (Neuss) in Germany, the previous base of the Legio XX. Bidwell suggests that the pottery industry of the early *colonia* was the work of immigrant potters who followed the legion and evidently remained when the army left, as the kilns continue in use up until the revolt (CAR 10, 491). Only the production of a local cooking pot design (*Cam.* 266) suggests native influence; otherwise the kilns produced flagons, colour-coated copies of Lyon beakers, and copies of Gallo-Belgic and Pompeian red platters. Simplified native forms continued to be used at Sheepen during this period, but it is not clear if these were produced here or elsewhere in northern Essex (ibid, 491).

Tile production was also carried out at Sheepen; at least one tile manufacturing site was identified during the 1930s dig at site Z (Hawkes and Hull 1947, 115, 119). In addition to the locally produced red tiles, there is evidence that cream-coloured tiles were imported from Eccles (Kent). These tiles are found across Essex, although in smaller numbers than red tiles, suggesting that the two products were used together to create a distinctive pattern (CAR 6, 259–60).

The rubbish pits at Sheepen contained abundant quantities of high-quality goods such as samian ware, fine glass, Gallo-Belgic wares and *amphoræ*. Copper-alloy coins were also not uncommon on the site, all of which points to healthy continental trade and a high standard of living for at least part of the Sheepen population (Hawkes and Hull 1947, 38;

Niblett 1985, 25). Large quantities of Italian wine, fish sauce and olive oil were evidently consumed by the Sheepen population, so either native traders had rapidly acquired a taste for Roman cuisine or a community of continental workers had assembled here.

Diet

The Boudican deposits have proved to be rich in carbonised organic remains which provide evidence for the kind of foodstuffs available in the city. Excavations at Culver Street, the Gilberd School, Balkerne Lane and Lion Walk have produced evidence of wheat, oats, barley, flax, dates, plums and figs (CAR 3, 40, 105, 108, 110, 288–9; CAR 6, 273–5, 284, 703–8). Carbonised food remains were found in a number of reused barrack blocks: in one (MON523; Fig 7.10), a small pile of grain was recovered, and in another (MON466; Fig 7.13; CAR 3, 40), burnt dates and a plum. One room of a reused barracks (MON522; Fig 7.10) contained wild plant seeds and possible crop waste, while another had an occupation level containing carbonised cereal grains, hazelnut shell fragments, fish bones and avian eggshell (CAR 6, 43).

The pottery shop found on the Curry's site in the High Street (MON860; Fig 6.1) produced charred cones of Mediterranean stone pine, figs and a large deposit of coriander 'seeds', dill, aniseed, celery, opium poppy, flax/linseed, lentil, horse bean and cereals; evidently food was also on sale here (Hull 1958, 198–202; Crummy 2001, 83). Elsewhere, the 1999 excavations at Long Wyre Street produced small amounts of charred weed seeds, cereals and other food plants, while an oven from the site included a hazelnut shell and a *Rubus* (blackberry/raspberry) fruit stone (Murphy 2000b). In 1771 a 'stratum of burnt wheat' was recorded under a tessellated pavement in *Insula* 11 (Hull 1958, 103, no. 21 and 22); clearly, day-to-day foodstuffs were kept in buildings across the city and no doubt more material will be found.

Cemeteries

The Colchester–London road was the main focus for burials in the fortress and early *colonia* periods. Initially a cemetery developed close to the road junction at the Royal Grammar School, at the point where the London road reaches the head of the Sheepen valley (Fig 3.2). A number of carved tombstones and funerary sculptures associated with wealthy Roman burials have been recovered from this area. The cemetery appears to have been established by the Roman military, as no late Iron Age burials have been recorded nearby. The cemetery expanded when the *colonia* was founded, as wealthy civilian burials and mortuary monuments were placed alongside the road and less ostentatious graves were placed in plots further back from the roadway. Two of the finest military tombstones from Roman Britain were recovered from near the London road (Wise 2001; 2005). These memorials to M Favonius Facilis and Longinus were both found lying face down in remarkably unweathered condition (Figs 6.3, 6.4). It is not confirmed whether these two tombstones belong to the fortress period or the *colonia* (see Chapter 5). Their freshness, along with the apparent defacement of the head of Longinus, gave rise to the idea that the tombstones were damaged and thrown down during the Boudican revolt. In 1996 the head of Longinus was recovered, along with other missing fragments, and subsequently restored to the tombstone in 2000 (Fawn 1997). The location of the missing fragments and their condition call into question the theory that the tombstone of Longinus was defaced during the Boudican uprising (Wise 2001, 43–4).



Fig 6.3 The tombstone of Marcus Favonius Facilis provides remarkable evidence for the weapons,

armour and clothing of a centurion of the mid-1st century AD (Colchester Museums).



Fig 6.4 The tombstone of Longinus shows a mounted Roman cavalryman riding triumphantly over a cowering barbarian (Colchester Museums).

In the 19th century a number of grave groups were recovered; these were dated in the 1920s to the pre-revolt period (May 1930). In the Joslin collection six groups are dated to *c* AD 40–50 and ten are dated to *c* AD 50–60, all probably from the Beverley Road area. In the Taylor collection two groups from West Lodge are dated to *c* AD 50–60, as are two groups from the Jarmin collection, the provenances of which are unknown. One of the Joslin groups was exceptional, containing one of the largest coin-dated assemblages of Gaulish pipeclay figurines in the Empire (Fig 6.5; Smith 1868, 229; May 1930, 251–3; Eckardt 1999). The group is known as the ‘Child’s Grave’ because of the toy-like qualities of the figures, but this interpretation has now been challenged (Boekel 1986, 71; Gonzenbach 1995, 419–20). May’s date of *c* AD 40–50 has also been questioned, as the coin evidence suggests a date for the grave of *c* AD 52–65, and for the samian ware a date of *c* AD 50–65 (Eckardt 1999, 79–80). This group also contained the burnt decorated remains of a couch, incorporating heavily ornamented bone inlays and metal rods (May 1930, 251–3, pl LXXV; Toynbee 1962, 186, pl 172; CAR 9, 259–60 and 270; Niblett 1999, 174–5, Eckardt 1999, 77).

In 1970 five cremations of Neronian date were excavated at Sheepen, but it is uncertain whether they date from before or after the revolt (Niblett 1985, 22). The graves were evidently those of wealthy individuals as they contained samian ware, glass and fine wood, as well as a leather burial casket embellished with brass studs in the form of a lion’s head, an ornamental lock plate and decorative brass rings with paste beads. There is some indication that the burials may have lain within an enclosure delimited by a ditch or a robbed wall.

Elsewhere within Camulodunum there is evidence for the continued use of existing native burial zones. The continuity of the Lexden cemetery is suggested by a burial with a probable Claudian *amphora* found at St Clare Drive (Fig 3.2; Hull’s inventory of grave groups 294; COLEM:1931.2056–9, Sealey 2009, 33), and by another early Claudian burial found nearby in 1940 (Hull 1942, 59–65). The northern part of this cemetery also produced a few scattered burials containing high-quality Gallo-Belgic pottery along with Roman pottery and brooches, including Gaulish imports. This cemetery may have continued in use until the revolt, although Hull suggests that the site was abandoned at the founding of the *colonia c* AD 50 (Hull 1958, 253). To the south-east of the city the continuity of burial areas on the site of the modern Colchester Cemetery site is suggested by burial GG578 (COLEM:1948.1), which contained a Belgic bowl with two Roman urns (ELM843). Continuity of Iron Age burial areas is also suggested by 1st-century Roman burials recovered from Barnhall (COLEM:1947.147) and Abbey Field (COLEM:1925.5045).



Fig 6.5 The 'Child's Grave' is an outstanding burial from Roman Britain and demonstrates the pre-eminence of Colchester in the early years of the colonia (Colchester Museums).

The most remarkable evidence for the retention of late Iron Age burial customs after the Conquest comes from a group of elite native burials from three enclosures at Stanway, 4km south-west of Colchester (Fig 4.7; CAR 11, 169–70; Crummy 1997a; 1997b; 1998a; Benfield and Brooks 1999; Crummy 2001, 23–7). Here there is evidence for a complex native rite involving the breaking of rich grave goods and the cremation of the body on a funeral pyre, followed by the deposition of the remains in a chamber, which may then have been covered with a mound. Adjacent to three of the burial chambers were smaller rectangular enclosures, in which burnt areas suggest pre-burial pyre sites. The rite is similar to that noted at Folly Lane (Niblett 1999) and appears to be related to a local tradition also seen at Lexden Tumulus and Enclosure 1 at Stanway, both dating from before the Conquest. Recent work on the pottery from Stanway now places all the burials from the three later Stanway enclosures to after AD 43 (P Sealey, pers comm).

Of the three post-Conquest chambers, the largest was in Enclosure 3 and contained fragments of at least 24 vessels and the pedestal base of a copper-alloy figurine or vessel. The chamber of Enclosure 4 included parts of at least 10 vessels as well as a glass phial and glass and paste beads, suggesting that the occupant was female. Enclosure 5 had the latest chamber, which was dated to *c* AD 60. At least four burials were placed as satellites around the chambered tombs in Enclosures 3 and 5. These burials did not have wooden chambers or broken grave goods but featured intact remains, ranging from a simple pot cremation to a complex arrangement of grave goods. In 1992 a satellite grave was recovered in Enclosure 3 with over 20 pottery vessels, a gridiron, two copper-alloy vessels, a fine glass bowl, two other glass vessels and brooches, the remains of a folding wooden gaming board and a collection of 20 glass counters. This has become known as the 'Warrior Grave', as it also contained fragments of a spear and shield. Another grave in Enclosure 3 contained an inkpot. The finds from both these graves suggest that the occupants were royal functionaries, perhaps a literate retainer and an armour-bearer. An alternative interpretation of the 'Warrior Grave' is that it belongs to a native enlisted in an auxiliary unit of the Roman army. The enlistment

of local leaders in the Roman auxiliaries has been suggested for locations in Gaul (Ferdière and Villard 1993, 281–2).

The most spectacular satellite grave, known as the ‘Doctor’s Grave’, was excavated in 1996 and contained a variety of unusual grave goods. The grave pit was square with a floor at two levels. In the deepest part of the grave was placed a long wooden box which contained a gaming board with the pieces laid out as if a game was in progress. Cremated remains were placed over the board in a heap or in a bag, and higher up in the box were medical instruments and metal rods, two brooches and a bead. At the other end of the pit was a dinner service of ceramic and metal vessels. The presence of the rods and the surgical instruments have suggested to some that the grave’s occupant was a druid, as druidic training included both medicine and divination (Crummy 1997a, 6–7; Crummy 1997b, 342; Ross 1999, 65). Alternatively, given the hostility of the Romans towards the druids, the occupant may have been a physician or surgeon from the Mediterranean or Greek tradition of medicine (Wacher 1998a, 214). Links between two Greek doctors and the early Roman occupation at Colchester have been noted on inscriptions from Chester and the island of Cos (Bale 1985, 27–9). However, the fact that the medical instruments were made of iron suggests that the occupant was a native healer; Mediterranean doctors commonly used bronze instruments and the Stanway instruments are of Celtic rather than standard Roman design (Crummy 1997a, 6–8; Jackson 1997, 1471–3).

Resistance to Rome – evidence for the Boudican revolt

A flavour of the period leading up to the revolt was provided by the recovery of disarticulated human remains from the fortress ditch during the Balcerne Lane excavation. These, which derived from six individuals, consisted mainly of parts of limbs, but there were also two skulls, each of which bore the marks of a heavy blow. It is suggested that the heads may have been placed on stakes at the gate of the early *colonia*, the victims perhaps being thieves or rebels from the native population (CAR 3, 97; Crummy 2001, 54).

Evidence for Boudican destruction has been recorded not just across the *colonia* but also at the ribbon settlement at Balcerne Lane (Fig 7.28; CAR 3, 103) and at settlements to the west at Sheepen (Fig 4.9; Hawkes and Hull 1947, 56) and 147 Lexden Road (Brasier 1986). The destruction horizon varies in depth from a few centimetres to up to half a metre and its characteristics also vary from area to area. Deposits may be deeper near collapsed walls or more mixed in character where debris has been cleared into a pile. In other areas the layer is absent, reflecting the presence of gardens or yards, or perhaps thorough cleaning. The destruction deposit itself contains large quantities of burnt daub, as well as painted wall plaster and roofing tiles, but notably little window glass or pottery.

A curious feature of the destruction deposits excavated to date is the lack of coin hoards. The imminent assault on the city by the Boudican forces would surely have been a compelling reason to hide one’s personal wealth, yet coin finds have been modest. The largest find was from the Telephone Exchange site, excavated in 1926–7, where a small hoard of 27 coins was placed in a pot and probably hidden prior to the revolt (Hull 1958, 104). Elsewhere, at Balcerne Gardens, four coins found close together in 1965 could have been in a purse lost in the revolt (Dunnett 1971a, 61), and at Culver Street six coins were found in what appeared to be the remains of a wooden casket with bronze fittings (CAR 6, 165).

Distinctive burnt assemblages from Colchester include those from the High Street pottery shops (MON709 and MON860; Fig 6.1) and the supply depot at Nunn’s Road NCP car park, (MON816; Fig 5.1), as well as the copper-alloy objects (CAR 6, 135), the

burnt bed (CAR 3, 1984b, 42–7) and the lamp moulds (Dunnett 1971a, 33–5). Other interesting finds include a shield and a *pilum* (or javelin) head broken and lodged inside an oven in a house at Balcerne Lane (CAR 3, 106–7), a semicircular iron grate or gridiron from a house excavated at the Gilbert School (CAR 6, 134), and balances and weights from the floors of several burnt houses.

The recovery pattern for household objects and personal belongings suggests certain possibilities. The material possessions of the early colonists may have been modest and houses sparsely decorated. Alternatively, widespread looting by the rebels or the evacuation of some of their belongings by the colonists could account for the general lack of objects. It is also conceivable that the intensity of the fire may have destroyed far more than is assumed. The real picture may be a combination of these factors, although the torching of fully stocked shops suggests that evacuation could not have been widespread and that the desire to loot was in places eclipsed by more emotive preoccupations.

Away from the city the head of an equestrian bronze statue of Claudius was recovered from the river Alde in Suffolk and part of a horse's leg, perhaps from the same statue, was recovered at Ashill, Norfolk. These finds are thought to be loot from the city (Lawson 1986; Sealey 1997, 26–9).

An odd characteristic of the destruction horizon is the absence of human remains amongst the debris. The charred remains of a disarticulated human skeleton were found lying on a clay surface at the Telephone Exchange Site in 1964 (Dunnett 1971a, 8). In addition, at Sheepen the discovery of skull fragments in a kiln at the Endsleigh School playing field may be related to the revolt (MON847; Hull 1963, 158). But the general absence of human remains is curious given the number of deaths recorded by Tacitus. It may be that the inhabitants took refuge inside the Temple of Claudius, as Tacitus records, and that the site was ritually cleaned following the revolt. Alternatively, we can imagine a more grisly outcome involving the removal of the citizens for execution.

The current state of knowledge

by Philip Crummy

Most of the street grid of the early *colonia* is accurately known. There are a few problem streets where either the widths are uncertain (that is, between *Insulae* 26 and 34 and *Insulae* 13 and 21) or the date of construction is either Period 1 or 2 (that is, between *Insulae* 33a–b and 25a–b). The extent of the new *colonia* equated more or less to the area formerly occupied by the fortress, its annexe and *canabae*. However, the relationship between the military annexe and the east side of the *colonia* is problematic. The large *insulae* (*Insulae* 22 and 30) look as if they were formed out of the annexe, but the street leading northwards from the waterworks in *Insula* 15 is on the military alignment, thus suggesting that the annexe extended a good deal further to the east than the eastern sides of *Insulae* 22 and 30 (Fig 6.1).

The public buildings of the town are not clearly understood. The Temple of Claudius was pre-Boudican and, although not closely datable from the excavation evidence (Crummy 1982b), the theatre was probably of the same date, given its proximity to the temple and its alignment. Large fragments of burnt moulded plaster indicate the presence of a pre-Boudican public building in *Insula* 29. Although little is known about the building(s) in *Insula* 30, its size, its balanced relationship to *Insula* 22 and the existence of later monumental foundations in the *insula* (Crummy 1971) all strongly suggest that there would have been at least one public building there. Apart from the monumental arch at the

Balkerne Gate, the construction of which is likely to date to *c* AD 50 (CAR 3, 121–3; CAR 6, 13–15), no other public buildings can be identified.

No buildings, except for the Temple of Claudius and possibly the Roman theatre (assuming that it is pre-Boudican in origin), have been found which survived the Boudican fire. The destruction of the town appears to have been almost complete. The impact of the Boudican revolt outside the *colonia* is not clear. Sheepen appears to have been burnt (Hawkes and Hull 1947, 53–6). Excavations at Gosbecks have been too limited to determine if that was similarly affected. Gryme's Dyke looks as if it was an early post-Boudican defensive measure (Figs 3.2, 4.4), and the so-called palisaded enclosure at Sheepen may have had a similar purpose (Fig 4.9; Crummy 2001, 90).

Preservation

As is the case with the fortress, about 50 per cent of the early *colonia* has been destroyed by later activities (both Roman and post-Roman), but large areas may survive intact away from medieval and later building plots. Where remains do survive, they can be extraordinarily well preserved. The destruction of the early *colonia* in AD 60/1 had the effect of preserving structural details in timber and mud-brick walls to a degree that does not normally happen. The bases of walls survive in the demolition debris of the Boudican fire to a height which depends on the degree of clearance after the fire. In some places, clearance was thorough, and the new construction level corresponded to the pre-fire ground level (for example, Culver Street, Buildings 78 and 79; CAR 6, 43–8), so that little above floor level survives *in situ*. In others, the new floor levels were much higher and 0.6m or more of the bases of the walls of the pre-Boudican buildings were left *in situ* under the new houses (for example, Culver Street, Building 77; *ibid*, 39–43). It is difficult at present to see any pattern in the degree to which the sites were reduced. The Old Post Office site and the Harpers site, both in Head Street, suggest that the west end of the *colonia* was not reduced in height as much as occurred elsewhere, and that this is one part of the city where the pre-Boudican houses are likely to be exceptionally well preserved.

Importance

Colchester is unique in that it is a place where we can study, apparently with an exceptional degree of clarity, the way in which fortresses were converted into towns. There are other examples of fortresses being converted in this way in Britain – namely Lincoln, Gloucester, Wroxeter and Exeter (Webster 1988, 145–66, 48–73, 120–44, 91–119; Crummy 1982a, 125–30; CAR 3, 10–11) – but there are difficulties in all those places in distinguishing the civilian reuse of a building from its military use. The Boudican destruction of Colchester makes it possible to do this, because the Boudican levels are usually easily recognised and the revolt came at a time when many of the reused military buildings still existed.

Colchester was the earliest Roman *colonia* in Britain and represents a major early introduction of Roman culture into Britain. It was the centre of the imperial cult and the foremost settlement in the new province of Britannia until the rise in importance of London in the Flavian period. Unlike the other *coloniae* in Britain, it was the only one to be founded inside a major British settlement, and is thus an important place for studying the relationships between Roman and Briton, before the Conquest as well as afterwards.

Boudican Colchester and London are the nearest British equivalents to Pompeii or Herculaneum. Boudican deposits in Britain are very rare; the only three places where Boudican destruction has been identified for certain are Colchester, London and St Albans, and of these the St Albans deposits are relatively limited (Niblett 2001, 67). The Boudican

deposits are exceptionally important because of their good preservation, close dating, the ease by which they can generally be identified and the insight they provide into the process by which some redundant fortresses were converted into Roman *coloniae*. The charred organic remains provide unparalleled preservation and the evidence for the structure of timber and clay walls survives to a degree that does not usually happen where the deposits are unburnt.

Potential for future research

There is considerable scope for filling in details about the extent, layout and buildings of the pre-Boudican city. Given sufficient excavation, most of the public buildings and their functions could be identified from their plans and the width of their walls and foundations. In particular, the baths may prove relatively easy to identify. The theatre could be much better dated with more excavation, and it could be determined whether or not it is pre-Boudican in origin. Excavation could reveal whether or not the *principia* was reused as the forum-basilica in the new town. This would have a bearing on the study of the evolution of the forum-basilica in Britain, for which a military connection was suggested some time ago (Hassall 1979, 246–8). The degree to which military buildings were reused in the new *colonia* could be further explored: previous excavations, particularly at Lion Walk and Culver Street, have already demonstrated how effectively this can be done. Limited excavations inside Colchester Castle could determine the exact dimensions of the podium of the Temple of Claudius, which would be of considerable help in the theoretical reconstruction of the superstructure of the temple (Fig 7.19; Crummy 1980a, 243–51).

Further excavation will continue to reveal more information about building techniques in the early town. Unrecorded variations of wall structure still continue to be found, despite all the excavation of the Boudican deposits that has taken place so far. For example, in 2002 a wide mud-brick wall which had chevron patterns on both faces and timber ground plates without mortar plinths was found at the Harpers site in Head Street.

Further investigation of the Boudican remains is likely to provide more preserved organic materials relating to food, furniture and house fittings, and distributions of charred animal and plant remains on the floors of the rooms might indicate something about their use. Unusual discoveries in the past – for example, dates and a bed or couch – suggest that anything organic might survive well in carbonised form given the right conditions of combustion. They show that the Boudican remains are unpredictable and are likely to produce major finds.

7 The later Roman town, AD 61–410

by David Radford

Introduction and historical framework

by Rosalind Niblett

After the Boudican revolt Colchester was re-established as a *colonia* and remained so for over 300 years. This section very briefly sets Roman Colchester in the context of the administrative, social and commercial system operating in Roman Britain over this long period.

The Roman way of life required towns. They were not only a vital part of the system of provincial administration and taxation, but also an essential vehicle for the dissemination of the Roman concept of *humanitas*, a set of principles to enable civilised, orderly conduct (Woolf 1998, 55–67). The problem was that even in south and south-eastern Britain pre-Roman towns did not exist; the *oppida* at Verulamium, Silchester and Camulodunum were the nearest approximation to them. The provincial governors therefore initiated and encouraged a policy of urbanisation.

Not all towns developed in the same way. In areas where local rulers were generally friendly towards Rome, towns were established early, developing from established ‘royal’ centres at Silchester, Verulamium and perhaps Canterbury (Mattingley 2006, 270–1; Creighton 2006, 145). Where resistance was more robust, requiring closer military supervision, urban development was either delayed or took the form of a *colonia* of superannuated soldiers (at Colchester, Gloucester and Lincoln). In many cases it was not until the general organisation of the British *civitates* in the later 1st century that major urban centres were established. The *civitates* were administrative divisions based largely on indigenous tribal areas, and in each a major town was established as the main administrative centre.

Although differing in their origins, all major Romano-British towns shared some basic features – a regular street grid and monumental public buildings including a forum, basilica, temples and baths. These towns were organised on Roman lines with town councils, made up of *decurions*, drawn from the landowning elite, who were encouraged to display their wealth, status and loyalty to Rome by contributing to the construction of monumental buildings in the classical style and participating in the civic and religious aspects of urban life. At the same time, differences in their origins, and in the attitude of inhabitants and state authorities towards them, influenced their development (Mattingley 2006, 267; Creighton 2006, 121, 124–49). The distinctive features at Colchester in the post-Boudican period were the rebuilt Temple of Claudius and the town wall; these imply that the town’s pre-eminent status was retained, but the origins and ethnicity of the post-Boudican population are far from clear. It is assumed that following the revolt the *colonia*’s depleted population was augmented by a fresh settlement of retired soldiers, although as noted below, the density of occupation in the later 1st-century town was lower than before the revolt.

As the *civitates* were being established in the Flavian period, the question of the Trinovantes must have arisen. It has been suggested that Chelmsford was designed originally to be the Trinovantian capital (Wacher 1995, 208), but supporting evidence is lacking, and in the absence of any convincing alternative it is probable that Colchester

fulfilled this role. This meant that unlike the Dobunni and Corieltauvi, the other two tribes in whose territories 1st-century *coloniae* were established, the Trinovantes had no separate civitas capital; presumably due to their role in the Boudican revolt.

The Temple of Claudius, the theatre and the suspected public buildings to the south of them, all lie in close proximity to each other in the area of the former legionary annexe. Creighton has suggested that this sort of careful grouping is typical of early towns on earlier fortress sites. He suggests this grouping of important buildings reflected the ordered, communal lifestyles familiar to Roman soldiers. He contrasts these towns with other early centres, including several *civitas* capitals, where significant buildings (temples, forum, baths or theatre) were spaced out allowing elite families to display their status through the public processions that formed an important part in civic life in the empire as a whole (Creighton 2006, 83–5, 108–15). At Colchester we can see these two influences on the development of Romano-British towns in the south-east coming together. By the early 2nd century the importance of public processions, particularly on ceremonial occasions, was clearly appreciated by the local elite. The siting of the circus, carefully aligned between two major roads leading from the *colonia*, one of which led directly to the Temple of Claudius, is a powerful illustration of this concept, and supports the possibility that Colchester was indeed the location of the annual celebration of the imperial cult (Drury 1984, 29; Wilkes 1996, 29; Fishwick 1997, 48–9; Crummy 2008d, 17, fig 2). At Lyons such celebrations were accompanied by gladiatorial games (Woolf 1998, 216–7); at Colchester perhaps it was chariot racing.

Colchester can usefully be compared to Verulamium. Like Colchester, Verulamium developed from an existing late Iron Age centre, but the original layout of the Roman town was focused on a high-status burial enclosure dating to the Conquest period; this lay outside the Roman town but was linked to it by a processional way and was venerated until the early 3rd century (Niblett 1999, 408–17). Creighton has identified a number of other towns, all *civitas* capitals, which may have had similar origins, and raises the interesting speculation that had it not been for the presence of the *colonia*, a Trinovantian civitas centre might have developed in a similar way, focused on the Gosbecks enclosure (Creighton 2006, 124). As it was, the monumentalisation of the existing cult centre at Gosbecks allowed the local elite to simultaneously demonstrate their wealth, legitimise their position by stressing their connection with a traditional, indigenous cult and demonstrate support for Rome by embracing classical architectural forms. Similar integration of traditions can be paralleled both at Verulamium and at some of the rural ‘sanctuaries’ in northern Gaul.

As centres of population, and situated on major roads, towns naturally developed trade and production functions. The wealth of material culture evident from Colchester may have resulted in part from its status and in part from its agriculturally rich hinterland, but in addition the town probably continued to benefit from trading contracts established in the Conquest period, including military supply contracts. Although Colchester lost its prime role as a port to London in the later 1st century, it had clearly continued to benefit from coastal trade as demonstrated by the distribution of late 2nd-century Colchester *mortaria* in south-east Scotland (Hull 1963; Hartley 1973; MacIvor *et al* 1981, table 2).

The three and a half centuries after the Claudian invasion saw major changes, both to the wider empire and to Britain. Fourth-century Britain was very different from the Britain of the 2nd century. Following the assassination of the emperor Severus Alexander in 235, the Roman Empire entered a period of unprecedented disruption resulting in a major reorganisation under Diocletian at the end of the 3rd century. The barbarian incursions into Gaul in the 3rd century had disrupted the trading axis along the Rhine and Rhone, and it is

possible that this affected Colchester more severely than more inland areas; certainly there was a sharp decline in the construction of wealthy town houses in the *colonia*.

The nature of towns in 4th-century Britain is the subject of much debate, and the evidence is often equivocal. For instance, in London the basilica was demolished in the late 3rd century, while at Silchester the basilica was converted to a metalworking establishment. Clearly these buildings were no longer seen as essential to the functioning of these towns. On the other hand the forum/basilicas at Caerwent and Cirencester continued to be maintained in the 4th century, and the Verulamium basilica was extended. Clearly 4th-century towns continued to operate, but on a reduced scale and in a rather different and more utilitarian way. At Silchester there was large scale replanning in the north-west part of the town (Fulford *et al* 2006, 249–52, 282–3) and though some monumental buildings in the south-west quarter of London were being demolished in the later 3rd century, a new ‘palace’ complex was constructed some time after 293/4 (Fulford 2008).

Tax gathering and administrative functions no longer concentrated in major towns, but were shared with the small towns. Increasing insecurity in the late Roman period may have led to the provision of well-defended strong points, where taxes and/or supplies could be protected, and local administration conducted. It has been suggested that the early 3rd-century Saxon Shore forts (Caistor on Sea, Brancaster and Reculver) were originally established as collecting points for agricultural produce prior to export. Later the system was extended in the face of increasing threats of piracy. (Pearson 2005, 82). Great Chesterford, 52km north-west of Colchester was redefended, almost certainly at official instigation, and arguably used as a strong point for the storage of the corn tax (Medlycott, forthcoming). Caistor by Norwich was defended with a stone wall also arguably built at official instigation to provide a defensible strong point. The recutting of the Colchester town ditch, the construction of the large barn in *insula* 35, the possible late Roman extension to a public building at the expense of private houses south of *insula* 30 (Crummy 1971, 107) and even the late Roman alterations to the Temple of Claudius precinct may all be part of the same wider concern to store tax collected in kind in a defensible location (Drury 1984, 35–7; Faulkner 2000, 128–9).

The supply of grain to feed the army was an overriding concern to the late Roman administration and as the demands of the state grew there was an intensification of cereal production. In the late Roman period Essex sites are dominated by large-scale arable production (Germany 2003, 222; Havis and Brooks 2004b, 534; Timby *et al* 2007, 163). The rising sea level affected much of the East Anglian coast line in the later Roman period, although the effect on the economy is not yet clear. The coastal salt workings which had flourished in the 1st and 2nd centuries declined, possibly because of the rise of the Droitwich salt works, but perhaps also due to the disruption of established trade routes.

No doubt the local landowning classes suffered economically with these changes in established industries and trade patterns along with rising taxation, and these effects will have percolated down through society. In the countryside, there is no sign in the Trinovantian *civitas* as a whole of wealth on the scale of some late Roman villa estates further west.

In spite of the evidence for decline, particularly in elite building, the Butt Road cemetery shows that Colchester was still a centre of population in the later 4th century, while the strict layout of the burials implies a continuing authority in some form, whether secular, or religious, or both. The question of the ultimate fate of Colchester in the 5th century is the subject of the next chapter.

Past work

by David Radford

Reports on the Roman pavements and chance finds discovered around Colchester were published in 18th-century antiquarian texts such as Philip Morant's *History and Antiquities of Colchester* (Morant 1768, bk I, 182–91) and in *Vetusta Monumenta* for 1794 (vol iii, pl xxxix). Systematic investigations did not follow until the mid-19th century when the expanding town produced a flood of finds, stimulating local interest especially in the extensive Roman cemeteries encountered as development spread westwards along the Lexden Road. At Gosbecks Farm, ploughing produced a spread of Roman tile, which encouraged the Revd Henry Jenkins to excavate the 'villa' there in 1842. Within the town itself Castle Park was a potentially rich playground for gentlemen archaeologists, and was still at this time privately owned by the Round family. In 1845 the Revd J T Round uncovered Roman walls in the park, and in 1852 the Essex Archaeological Society held an inaugural excavation which revealed the north-east gate of the town wall, a 'cloaca/bathhouse' in Hollytrees Meadow and the tiled drain linking the two. Other late 19th-century excavations around the town encountered pottery kilns at Warren Field, demonstrating the importance of local Roman pottery production; a town house on North Hill; and, during the making of Castle Park, part of a Roman precinct wall, later identified as that of the Temple of Claudius, a structure referred to by Classical writers Tacitus (*Annals* XIV, xxxi) and Seneca (*The Apocolocyntosis* VIII, iii). By the end of the 19th century a superb collection of artefacts had been recovered, but the level of understanding regarding the layout and evolution of the Roman city remained at a pretty basic level (Cutts 1889, 32–47, Fig 1.4).

Mortimer Wheeler excavated the Balcerne Gate in 1917 and a series of town houses in Castle Park in 1920, and correctly identified the large septaria platform below the Norman castle as part of the Temple of Claudius (Wheeler and Laver 1921, 146–7; Wheeler 1921, 39). His preliminary street map and summary of Roman discoveries from the town were later used as the basis of Rex Hull's *Roman Colchester* (1958). This landmark study summarised excavation work in the town, including those undertaken by the author from 1928 to 1956, and contained a significantly improved plan of the street grid (Hull 1958). Key discoveries from this period included the altar in front of the Temple of Claudius by P G Laver and E J Rudsdale (1931–4) and 'public buildings' in *Insulae* 29 and 30 on the site of St Nicholas's Church (1955–6). The work undertaken by Hawkes, Hull and others at Sheepen in the 1930s and later also produced a considerable assemblage of finds. Discoveries from the area included the only excavated example of a samian kiln in Britain, as well as series of Roman temples, wooden structures and dumps. In addition to the Sheepen site report, which included a detailed pottery typology and the first rigorous published study of a large Romano-British glass assemblage, Hull later brought together the information from the various kiln sites in a separate volume (Hull 1963) and compiled a series of notebooks detailing work on the Roman town and the numerous grave groups recovered from nearby cemeteries.

In the 1950s the boys of the Royal Grammar School, under the direction of A F Hall, revealed significant Roman remains, including a Romano-Celtic temple and the main Roman road junction south-west of the city. Another important advance was the identification of the Roman theatre in Maidenburgh Street in the late 1950s (Hull 1960, 302). In 1964 Hebditch excavated the southern end of the precinct around the Temple of Claudius and recovered traces of a screen wall but no shops or offices, thereby ending

speculation that this area had been part of the forum. Attempts to date the town wall took a step forward following excavations at St Mary's Rectory in 1967, when it was realised that the wall had been freestanding and therefore could not be dated from the later rampart built against it (Dunnett 1971a, 68–9).

In the 1970s and 1980s the opportunity to undertake several large rescue excavations transformed our understanding of the Roman town. Excavations outside the north gate at Middleborough revealed traces of strip houses and high-status buildings including a well-preserved suburban villa. West of the town, at Balcerne Lane, the construction of a dual carriageway led to a significant reduction in the ground surface and here excavation revealed ribbon development along the Roman road from Balcerne Gate, plus water mains, religious buildings, land boundaries and agricultural plots. Inside the walls, excavations for Lion Walk and Culver Street shopping precincts examined large areas of domestic and agricultural buildings and plots covering nearly four *insulae*. Another large intramural site was excavated at the Gilberd School prior to terracing for the new Sixth Form College, and produced mostly early Roman remains. South of the town the development of a new police station at Butt Road allowed the investigation of a large multi-phase, 4th-century inhumation cemetery and an adjacent apsidal building, the whole being interpreted as a Christian cemetery and church.

In the late 1980s and 1990s investigations were more modest; nevertheless, significant excavations at Angel Yard (Shimmin and Carter 1996, 35–83), Osborne Street (Shimmin 1994, 46–59), Long Wyre Street (Brooks 2004c, 30), the Vineyard Press (Benfield and Garrod, 25–33) and the Mercury Theatre (ELM 903, 905, 919, 1019–24) encountered Roman buildings. In addition, sizeable parts of cremation cemeteries were excavated for the first time at Turner Rise and Abbey Field. In the new millennium there has been little slowing of the archaeological pace. A prime town-centre site excavated at Head Street revealed traces of town houses, streets and garden features. Cremation cemeteries have been investigated at Lexden Road and Abbey Field, and at the St Mary's Hospital site, west of the town, part of the extramural Roman suburb and a late inhumation cemetery have been excavated. South of the Roman town, excavations along Vineyard Street have revealed deep Roman deposits sealed by colluvium and later building along the stream valley here. Lastly, in 2004, excavations within the northern part of the Colchester Garrison redevelopment area revealed a large number of burials and evidence for Britain's first Roman circus (Crummey 2005a, 267–77).

Beyond the UAD study area, but within the *oppidum* as defined by the dyke system study area, Roman burials, occupation sites, dykes and roads have been investigated at numerous locations (*see* page 162–9). Work on the dyke system has been a major theme of investigation, with key excavations being the entrance in Gryme's Dyke (*CAR* 11, 27–9, 59–61), Triple Dyke at Straight Road (*ibid*, 55–9) and a section across Gryme's Dyke south of Dugard Ave (*ibid*, 109–15). Roman roads have been the passion of P G Laver, A F Hall and the Colchester Archaeological Group, and the aerial photographic work of the RAF, CUCAP, Essex County Council and Ida McMaster requires a mention. In 1932 aerial photography by the RAF demonstrated that Gosbecks contained a Roman temple complex and not a villa, as Jenkins had thought. The number of subsequent research excavations (1936, 1947–50, 1967, 1977 and 1995–9) is indicative of this site's importance and potential.

The archaeological evidence

Topographical organisation

It might be expected that there would have been some changes in settlement pattern in the aftermath of the Boudican revolt, arising from the conflict or subsequent retribution by the Roman authorities. Discontinuity certainly seems apparent at the principal late Iron Age foci at Sheepen and Gosbecks. At Sheepen Hill excavations have demonstrated that the revolt laid waste to the settlement and it appears that destruction was total. During the immediate aftermath a defensive ditch was cut by either the Boudican forces or the reoccupying Roman army (Ditch II, MON855). Shortly after the revolt these defences were levelled and the site cleared of debris, which was placed into pits. Only one roundhouse structure (ELM115) at Sheepen was dated to after the revolt; this was built over the filling of Ditch II and produced native coarse ware vessels and a Gallo-Belgic ware stamp of MEDDILLVS, of a type not found before AD 60. Two of the coarse ware vessels were of some age and had breaks repaired with lead rivets. The excavators suggested that these were family heirlooms belonging to a pro-Roman native family who were allowed to reoccupy the site (Hawkes and Hull 1947, 44). The Sheepen area never re-emerged as an important site. Later activity was restricted to a few huts, quarrying and a little metalworking, with areas set aside for burial and pottery manufacturing.

At Gosbecks small excavations carried out during the 1990s suggested that the Romano-British settlement here came to an end in the late 1st century, when an extensive religious complex was developed on the site. The Gosbecks Housing Estate evaluation produced evidence for late 1st-century activity but only two 2nd-century or later sherds (Brooks *et al* 1995, 261). Similarly, discontinuity can be noted at The Lindens on Lexden Road, where there is considerable occupation debris from the late Iron Age/early Roman period but only a handful of 2nd-century sherds (Crossan 2000a, 7–8). Elsewhere at Lexden Wood Golf Club, Westhouse Farm, the possibly middle Iron Age enclosure, also produced finds of early, but not later, Roman date (Brooks and Austin 2000; Orr 2002a, 3). Discontinuity is also suggested at the Stanway burial complex, where no burials have been demonstrated to post-date the revolt.

The disruption of native settlement around Colchester does not seem to have been repeated elsewhere in Trinovantian territory. Smaller settlements like Ardleigh (Brown 1999) and larger settlements like Heybridge (Atkinson and Preston *nd*) appear to demonstrate settlement continuity within the tribal area. It also seems unlikely that there was complete discontinuity of settlement outside the walled town of Camulodunum. For example, an excavation on the site of the Maternity Hospital in Lexden Road revealed rubbish pits containing pottery of mid-1st- to 4th-century date with a preponderance of 2nd- to 3rd-century wares (Shimmin 1997, 2; Crossan 2000c, 8). At Kirkee McMunn Barracks a late Iron Age/early Roman site was developed in the 2nd and 3rd centuries when it was occupied by a substantial group of buildings with a hypocaust, which the excavator characterised as of Romanised native type rather than a settlement for Roman colonists (Shimmin 1998b, 269). And near Berechurch Dyke an 'extensive occupation site' comprised a series of small parallel ditches and domestic pottery of both late Iron Age and 2nd-century date (*CAR* 11, 26, 137).

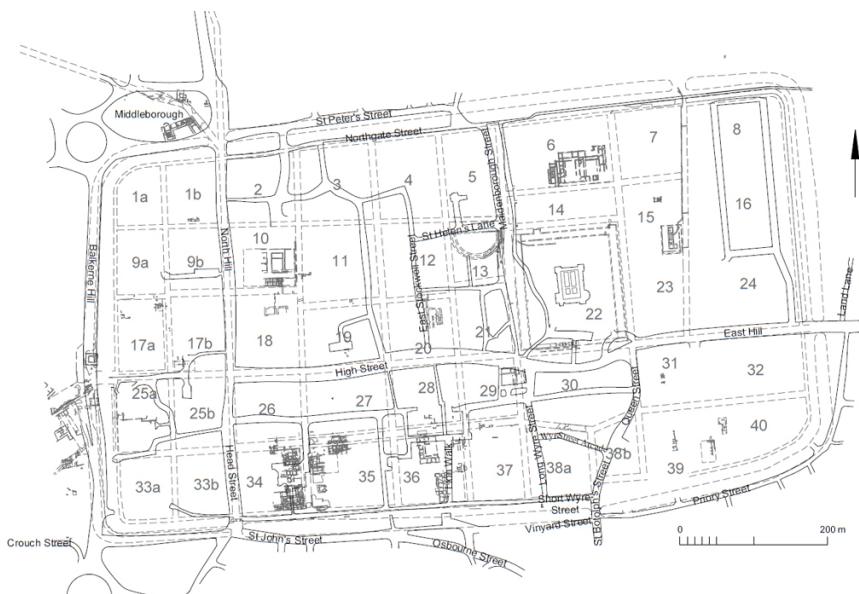
Where there is continuity we need to ask ourselves whether we are dealing with Romanised natives or colonists adopting native holdings. The strongest evidence for the continuity of a native elite has been recovered from the 1st-century villa at Rivenhall, 11 miles west of Colchester. Here the villa was built in Gallo-Roman style and was planted on the site of an Iron Age farmstead but with respect to the existing landscape (Rodwell and Rodwell 1986, 48–49). A Celtic bronze mirror dug up on the site of the villa, as well as a burial of distinctive British type contemporary with the foundation of the villa found in the

next-door field, point to a wealthy native occupant (Rodwell 1978b, 15). Certainly the presence of such an elite is inferred by the elaborate complex that developed at Gosbecks.

It has been suggested that after the revolt there may have been an attempt to move the tribal capital to Chelmsford (*Caesaromagus*). By the end of the 1st century a substantial *mansio* had been built there (Drury 1975, 170), but the subsequent modest development of the settlement would suggest that if there was such a strategy it was unsuccessful (Wickenden 1996, 91). In contrast, the development of the Romano-British temple complex at Gosbecks, with its associated 5,000-capacity theatre, suggests that the political status of Colchester was reaffirmed and that Gosbecks may have become the administrative focus of the *civitas* with the theatre specifically being the meeting place for the tribal council in the late 1st century (*CAR* 11, 105).

The refoundation of the city after the Boudican revolt involved the resurrection of the street grid and the reuse of some pre-Boudican building plots (Figs 7.1, 7.2, 7.11, 7.14, 7.28). Current thinking suggests that the town wall was built in c AD 65–80 and was designed to enclose a generous area to the north and east of the earlier *colonia* in order to allow for future expansion. The land north of the original *colonia* was gridded in a straightforward linear fashion, whereas the land east of the theatre was allowed to develop in a less uniform pattern; here the determining influences appear to have been the large *insula* set aside for the Temple of Claudius and perhaps pre-existing structures based around a water source in Hollytrees Meadow (Crummy 1999b, 93). The post-revolt town plan also saw the movement of the *via principalis* one *insula* to the west, taking the route of the modern Head Street and North Hill. The Balcerne Gate remained on the site of its military predecessor and the corresponding east gate was located at the end of the linked-up sections of the fortress *porta decumana* and *via decumana*, the line of which was not exactly straight. The south gate appears to be centred on the entrance to the Temple of Claudius and the north-east gate is in a curious position, perhaps dictated by a pre-existing road linked to the water supply in Hollytrees Meadow (Crummy 1999b, 91–3).

The Roman street (MON789) running south from Duncan's Gate completely disregards the *colonia* alignment and appears to be closer to the legionary alignment. Hull traced its line as far as the 'Mithraeum' in the Hollytrees Meadow excavations in 1927–9 (Hull 1958, 74–5). It has been suggested that the track originated in the military period and relates to the spring under the 'Mithraeum' or waterworks (P Crummy pers comm). Drury has argued that the street alignment continues south to the *decumanus maximus* (High Street) of the *colonia* on the basis of fossilised boundaries that survived as medieval building alignments (Drury 1984, 22 and fig 11). Drury also speculates that the northern side of the Temple of Claudius precinct (MON713) is not symmetrical with the southern side, suggesting that its line was dictated by a pre-existing road between *Insulae* 14 and 22. An excavation in 1950 found that this road lay over an earlier turf line and Drury argues that, if projected, the line of this road aligns with the waterworks, although a tessellated pavement found along this projected line would mean that it later became redundant (ibid, 22 and fig 11).



The expansion of the town northwards and eastwards can be contrasted with the apparent contraction of the settlement to the west and south. The western stretch of the town wall cut across the remains of earlier buildings and, interestingly, the remains of a 'Roman villa' were noted in the 19th century running under the wall near one of the southern bastions (Duncan 1858a, 57). At Culver Street the southern stretch of wall was found to occupy a similar position to the legionary rampart, but was on a slightly different alignment (CAR 6, 30).

An unusual feature of the civic infrastructure was the addition of gravel walkways along the perimeters of certain *insula* where high-status private residences were present and also on roads outside the walls at Balcerne Lane and at Middleborough. At Lion Walk the footways appeared to be built into the street rather than taking up *insula* space and, where dated, they appear to be later insertions rather than part of the early planned layout (CAR 3, 28). However, at Culver Street the footways seem to have been planned as part of the street grid and the fact that the footways pass through the Balcerne Gate also suggest an early planned approach (CAR 6, 10–14). At the Head Street Post Office site in *Insula* 33 an east-west footway was added as part of the post-revolt rebuilding (Brooks 2004b, 4). On average the walkways are 3m wide and separated from adjacent streets by a foundation that may have supported a veranda or perhaps a colonnade (CAR 3, 28). If the footways involved the

annexation of street space this would suggest that they were public routes. However, at Lion Walk the walkway foundation wall was divided into sections relating to property boundaries, suggesting private maintenance (*CAR 3*, 68). A similar relationship to plot boundaries was observed at Balcerne Lane (*ibid*, 127).

The Sheepen ditch



Fig 7.2 The later Roman town showing street grid and distribution of monuments and significant elements.

The town ditch and the Crouch Street ditch

following the route of the later town wall (*CAR* 3, 11–12). A large ditch was detected by a magnetometer survey outside Duncan's Gate in 1999 and is likely to be the Roman town ditch (interim note in *Britannia* 31 (2000): 413).

During excavations in Crouch Street in 1973 a sizeable ditch running east–west (MON648), thought to be no more than 2.1m deep and sealed by the later sub-floor of a hypocaust, was noted. It has been suggested that the ditch was part of an extended defended area around the suburb west of the town (*CAR* 3, fig 8) although no further evidence has come to light to confirm this view.



Fig 7.3 The Roman town wall to the south of the Balcerne Gate displays characteristic alternating courses of tile and septaria (Tony Nichols).

The town wall and internal rampart

The town wall at Colchester (MON570) is of considerable interest for a number of reasons. It may well be the earliest wall of its kind in Britannia and it appears to have been initially freestanding, a characteristic recorded elsewhere at *coloniae* in Gaul and Germany in the 1st and 2nd centuries but not in Britain. Furthermore, well-preserved sections of original Roman stonework and brick coursing survive, especially along Balcerne Hill, on the west side of the circuit (Fig 7.3). Excavations and watching briefs undertaken on the wall are too numerous to mention here but the most important sections can be noted.

The wall was built over a foundation trench 3m wide and 1.2m deep, which was filled with layers of mortar and septaria. The wall itself was of ashlar construction with inner and outer faces constructed with dressed septaria and courses of brick, and the core filled with mortar and septaria. When a section of the wall was excavated prior to removal for the Lion Walk underground access road, its lower levels proved to be very well preserved and pointed with pink mortar containing crushed brick. Chips of septaria found at the Culver Street excavation suggest that the stone was faced by masons on site; other features included patches of mortar lying on the remains of wooden boards used for mixing the mortar. Another interesting observation made at Culver Street was that fragmentary bricks rather

than fresh pieces were used to course the wall (*CAR* 6, 18), which may have been deliberate in order to form a stronger, better-bonded wall (Crummy 2003, 45). The brick may have been reused from structures destroyed in the Boudican revolt.

When completed, the wall measured 2,800m in length and 2.4m in thickness, and stood to an unknown height of probably over 6m. It was clearly built in sections and a number of joints have been identified (Crummy 2002a, 19–20). Work probably began from the freestanding arch at Balcerne Gate, as this was to be incorporated into a larger gateway here (see page 109). Six gates were built into the wall as well as a series of rectangular towers and tile drains at the end of streets. At some point, a V-shaped defensive ditch was cut around the outer foot of the wall.



Fig 7.4 The surviving pedestrian archway of the Balcerne Gate is only a small part of what was a massive entranceway into Roman Colchester from the west (Tony Nichols).

Excavations in 1913 recovered Flavian pottery from the earliest levels of the Balcerne Gate, but the stratigraphy was never fully recorded. Nevertheless, Wheeler accepted a 1st-century date for the wall following his excavation of the Balcerne Gate in 1917 (Wheeler and Laver 1921, 141). By the time Wheeler wrote a contribution on the wall for Hull's *Roman Colchester* in the late 1950s, five sections had been cut behind the interior of the wall, the most successful being that excavated by Miss Richardson in 1951 at the Sixth Form College, which produced a significant amount of stratified pottery from the interior rampart. This pottery convincingly dated the rampart as mid-2nd century or later. Because the interior pointing on the wall covered by the rampart appeared fresh, it was subsequently deduced that the rampart and wall were likely to be contemporary (Wheeler in Hull 1958, 62–3). However, a subsequent section cut at St Mary's Rectory in 1967 revealed a street surface under the rampart that appeared to be contemporary with the wall and thus demonstrated that the wall had been initially freestanding (Dunnett 1971a, 68–9). The wall was again neatly pointed but the dressed stonework and high standard of finish implied that the wall was designed to be exposed.

The evidence for an early date for the wall comes from excavations at Lion Walk and Culver Street. At Lion Walk the latest material in or under the wall's construction level was a sherd of *terra sigillata* of c AD 70–85 (CAR 10, 130, S494). At Culver Street the wall appeared to sit directly over Boudican destruction debris (CAR 6, 62–3). On the basis of the current evidence, Crummy has argued that the wall was built as a response to the Boudican revolt and consequently is the earliest structure of its kind in Britain (Crummy 2003a, 50–2) although this interpretation has been questioned by Wachter (1998b, 47–8). Stone town walls did not become the norm for major towns in the province until the mid–late 3rd century, although other earlier examples are known: for example, the *colonia* wall at Lincoln was erected in the early 2nd century (Jones *et al* 2003, 63).

The interior rampart around Colchester's town wall appears to have been added in the late 2nd century, and was built in part from waste material and building debris (Crummy 2001, 91). When Duncan cleared a long section of the north-east rampart in 1852–3 he found that it consisted of 'the ruins of buildings of burned and charred wood, tile and stonework, and of all kinds of Roman domestic utensils' (Duncan 1858a, 54). The V-shaped ditch around the outer base of the wall was sectioned around 1969 near Land Lane; the excavation demonstrated that the ditch was recut later in the Roman period as a wide and shallow flat-bottomed ditch with a vertical timber revetment along the inner face (interim report in *Britannia* 1 (1970): 290; Clarke 1971, 65).



Fig 7.5 A view of Duncan's Gate taken in 1929, following its conservation, which clearly shows the separate block of fallen masonry representing part of the tower (Colchester Museums).

The gates

Six gates have been identified in the Roman wall. The position of the main west gate, the Balkerne Gate (MON412), was determined by the location of the *porta decumana* and the *via decumana* of the fortress. Here a double monumental arch was constructed, probably when the *colonia* was founded. When the wall was added to the refounded *colonia*, the arch was integrated into the circuit, creating a double-arched gateway with flanking walkway

arches and external guardrooms (Fig 7.4; Wheeler 1921, 179–89; *CAR* 3, 121–3; *CAR* 6, 816; CAT Report 3/92a). Around c AD 300 the external defensive ditch was extended so that it crossed and thereby cut off the London road just beyond the Balcerne Gate. As no evidence of a bridge was found during excavations it must be assumed that the Balcerne Gate ceased to be used (*CAR* 3, 111). The monumental arch and most of the gate were demolished and the gap filled in (Crummy 2001, 115). An explanation for this change of use may be the gate's weakness from a defensive standpoint, due to the incorporation of the monumental arch (Crummy 2001, 89, 115). The southern walkway arch still stands, along with the base of the flanking guardroom (Smith 1847, 31–3).

The south-west gate, or Head Gate (MON765), increased in importance once the Balcerne Gate was closed and later became the principal gate of the medieval town. In 1893 a trench for a gas main struck the probable remains of the Roman gateway (Hull 1958, 60) and repairs to the town drains in 1913 also encountered Roman foundations in this area (Jarmin 1915, 107). In 1988 a watching brief confirmed the location of the Roman gate (*CAR* 6, 396–7) and in 2006 a second watching brief uncovered part of the central pier of the gate close to the modern ground surface. It was estimated that the pier measured 3.4m north–south by 2.2m east–west, and comprised a core of mortared septaria with south and east faces made of courses of brick and dressed stone set in *opus signinum*. The pier would have provided support for a double archway over the two carriageways and probably also an overhead gallery. The excavation enabled the width of the eastern carriageway – 3.4m – to be ascertained (Shimmin 2006a, 4–5).

The Roman East Gate (MON835) became one of the four principal medieval gates, which are shown on Speed's Map of 1610 with single-arched or square-headed gateways, suggesting that they had all been rebuilt in the Middle Ages. Morant records that it fell down in 1651 (1768, bk I, 7). Part of a Roman guardhouse is supposed to have survived on the southern side of the gate until 1813 (VCH 1994, *Essex* IX, 250, note 85). In 1925 a piece of walling likely to be part of East Gate was recorded under the pavement on the south side of East Hill (Hull 1958, 207, 111).

The road from Mersea Island may have entered the south-eastern area of the city via a gate at the bottom of Queen Street (MON924). A medieval gate was demolished here in 1814 and William Wire recorded foundations similar in construction to the town wall at the bottom of Queen Street in 1848 (Wire nd, c 1848). The North Gate (MON850) is recorded on a watercolour of c 1770 and was demolished in 1823. In 1944 part of this gate was uncovered and said to be excellently preserved and standing up to the level of the then pavement (CMR 1934–62, 23; interim note in *J Roman Stud* 35 (1945): 82–3; Hull 1958, 32).

The North-East Gate (MON786) was discovered in 1853 during excavations led by Dr P M Duncan and observed by William Wire (Duncan 1858b, 221–2). Subsequently named 'Duncan's Gate', it was re-excavated by the Colchester Excavation Committee in 1927–9 (Fig 7.5; Hull 1958, 36–42). The structure consisted of a tower gateway supported over a single passageway on rectangular piers set behind the face of the wall. A tiled drain ran under the roadway through the gate. The restored gate piers can be seen in Castle Park, along with a consolidated mass of masonry south of the gate which is the fallen remnants of the southern side of the tower, including two window arches.

The towers

The wall was furnished with defensive internal towers at strategic points around the circuit. None survives above ground, but the bases of several have been recorded. In 1892 Henry

Laver recorded a square masonry structure 19½ feet by 6½ feet (5.9m by 1.9m) attached to the rear of the wall in Castle Park (Laver 1906, 124). Hull discusses another tower of similar plan north of the East Gate, although its precise location is uncertain (Hull 1958, 43, plate XLI). Another tower is recorded at the north-east angle of the town wall (interim note in *J Roman Stud* 32 (1942): 111; CMR 1944, 17, 21; Hull 1958, 42). The remains of towers recorded in the western half of the wall circuit, where the street grid is better understood, are aligned along the centre line of *insula* streets. This is true of towers at 22/22a Northgate Street (interim note in *Essex Archaeol Hist* 26 (1995): 253; CAT Report 94/1a), the Gilbert School (now the Sixth Form College), Hull 1958, 221, 164, 168) and north of St Mary's Steps, Balcerne Hill (ibid, 62).

The drain arches

Water and waste from the *colonia* was channelled into the town ditch through arches in the wall. These were located at the end of streets and adjacent to the town gates. Arches have been examined at several locations (Wire nd, 11.11.1849; CAT Report 5/88b; Hull 1957; Hull 1958, 45, 60, 37 fig 12; *CAR* 6, 324–8, 817; Crummy 1988b, 9–10). In 1988 a drain was excavated in Short Wyre Street that was not located at the end of a Roman street, which suggests either that the wall was laid out before the street grid in this part of town or that the drain system was not as uniform as previously thought (Fig 7.6). The drain consisted of a single tile-built arch 1.2m wide and 1.1m high, the channel being approximately 0.6m wide and 0.6m high on a downward gradient of about 1 in 25. The drain extended 1.3m beyond the inner wall face, where it was roughly finished. Where the drain passed through the town wall a relieving arch of tiles had been constructed over it, creating a double-arched structure just under 2.0m across (Benfield 2000b).

Third-century alterations to the wall

In the late 3rd century the town ditch was widened and a counterscarp bank was created from the excavated material. Excavations at Balcerne Lane revealed that the town ditch (MON409/MON447) was recut from a deep V-shape into a wide U-shape and dumped soil from the widened ditch was placed over nearby cultivation beds (*CAR* 3, 140, 145 and figs 102, 105). Other late 3rd-century modifications included the reduction of the number of functional gates in the town wall. Balcerne Gate and Duncan's Gate were closed off and the town ditch was extended across their approaches (ibid, 18).

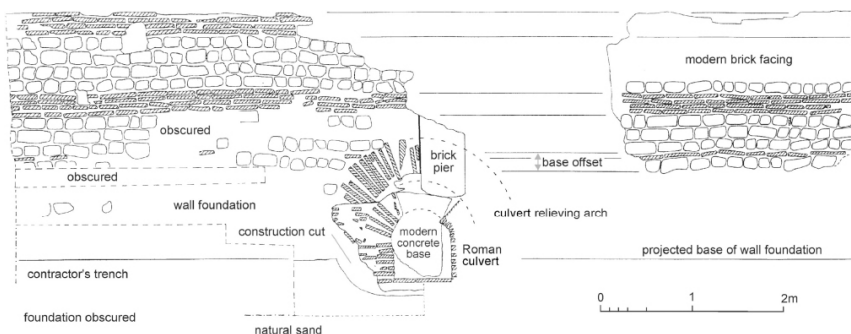


Fig 7.6 Elevation showing the interior face of the Roman town wall and the Roman culvert at Short Wyre Street (Colchester Archaeological Trust).

Roads

The early road network of the province would have focused on Colchester as the principal settlement: for example, the so-called 'Gartree Road' (Margary 57a), which runs south-east of Leicester, is aligned on Colchester (Fig 3.2; Rivet and Smith 1979, 117, fig 4). However, after London became the principal settlement in the province the influence of Colchester was quickly obscured (Collis 1984, 169; Hassall 1996, 20).

It seems that Colchester was initially linked to Braughing and St Albans via Stane Street, with a road from London being added later as this line joins Stane Street from the south near Marks Tey. Just to the west of the Colchester dyke system Stane Street is joined by one or two other alignments from the direction of Cambridge (Fig 3.2; Hull 1958, 12–13; *CAR* 11, fig 6.1 (TL9526)). From this junction Stane Street/London road takes an unconfirmed route through the dykes to a road junction located to the south-west of the Balcerne Gate and is generally referred to as the 'London road' along this stretch. The Roman road to London (MON794) probably entered Gryme's Dyke at the same point as the modern London Road because cropmarks to the west appear to converge at this point (*CAR* 9, 263). The entrance through Lexden Dyke is less straightforward. Logic would suggest a point of entry where the modern road passes through it; however, Hawkes noted a possible entrance point through the dyke 230m to the south (*CAR* 11, 42–4).

Further to the east possible stretches of this road have been exposed at a number of locations. The clearest section was obtained by A F Hall when he excavated the road at the Royal Grammar School in the 1930s. He recorded a triple-tracked construction, with timber revetting supporting the sides of the central roadway. The central road was 8.1m wide and consisted of a gravel bank with a series of lime and pebble layers with external ditches; beyond were flanking tracks of compacted sand c 6m wide (Hull 1958, 6–7).

A road junction was located in the grounds of the Royal Grammar School and a number of routes can be proposed which aligned on this junction. The clearest alignment is that of the road running south-east to Gosbecks (MON990). This is detectable as a cropmark at Gosbecks and has been sectioned twice (Hull 1958, 9–10; Benfield 1994). A Roman road (MON839) running NNW–SSE from this junction through the Grammar School grounds is a possible 'Cambridge road', but is more likely to be a local road leading to the Sheepen kilns. The course runs through the garden of 12 Lexden Road and in the 1950s Grammar School pupils excavated here and recovered a great quantity of burials of the 1st and 2nd centuries, two of which were said to encroach onto the road (CMR 1934, 14). If the London road is projected east of the junction on the same alignment then it would hit the river Colne at New Hythe. Philip Crummy has argued that the position of graves nearest the southern end of Butt Road is consistent with such an alignment (*CAR* 9, 15, 55). Another road led from this junction to the Balcerne Gate (MON384) and has been traced on several occasions. The excavations at Balcerne Lane recorded gravel metalling dating to the early *colonia* with post-Boudican resurfacing maintaining the same alignment. The road continued in use until the town ditch was extended over it at the end of the 3rd century. At a later date, once the ditch had silted up, a thin layer of metalling was laid over it; this contained a coin of AD 335–7 (*CAR* 3, 93). Elsewhere the road has been recorded several times (Laver 1889a, 126; Laver 'Diary' nd a, 2.8.1892, 6.12.1921, 18.12.1923; Hull 1958, 3; *CAR* 6, 890, 1035–6).

In addition to these principal alignments at the Royal Grammar School a number of actual and possible road surfaces have been observed, suggesting a more complex pattern of roads west of the town. Excavations at the St Mary's Hospital site in 2002/3 revealed evidence for a second major road running from the Balcerne Gate north-west towards the

entrance through Sheepen Dyke. Two minor roads, aligned north–south, ran off the north side of the road to Sheepen (Crummy 2003b, 13–14). More of the Sheepen road network was seen in 2007 when a road was located at the Colchester Institute, again with two accompanying minor roads (Brooks 2008, 12). Earlier, the Balkerne Lane excavations had revealed another east–west street (MON445) of 1st- or 2nd-century date to the south of the Balkerne Gate road (MON384), located at the east end of Manor Road (*CAR* 3, fig 8). The street had been laid down sometime during the late 1st to early 2nd century and was resurfaced several times; wheel ruts were noted in the earliest metalled surface. West of the road junction a cambered surface (MON716) was observed running from north-east to south-west (Laver nd a, 17.4.1923; Hull 1958, 8; CAT Report 4/97c). Other metalling observed by A F Hall west of the junction may, according to Crummy, be part of another non-related gravelled area (Hull 1958, 8, fig 1, G/1; *CAR* 9, 263).

Christopher Hawkes argued that Prettygate Dyke was slighted and used as a platform for an un-metalled Roman road (MON384), as the line runs westwards towards the entrance in Gryme's Dyke where a metalled surface was recorded (*CAR* 11, 48). Another cambered Roman road was observed running roughly east–west in Fitzwalter Road (MON841) (Laver nd a, 20.8.1923). An east–west Roman road (MON842) was recorded north of the Lexden Tumulus in a sewer trench cut along Fitzwalter Road (Laver nd a, 9.12.1923) and yet another poorly understood stretch of road (MON853) was revealed during the building of the north-east wing of the Essex County Hospital. Here a section records the road as 5.45m wide, with ditches 0.9m wide on either side (Hull 1958, 9). The line of a Roman road close to Maldon Road is suggested by Hull based on a cropmark running parallel to the east of Brickwall Farm; however, observation during the Gosbecks Estate development failed to find any trace of this (*ibid*, 260, fig 113).

A long-distance road is thought to run from the North Gate heading north in the general direction of Norwich (MON791); however, this route is poorly understood. Gravel deposits recorded at a watching brief at the Northgate Centre on North Station Road may belong to this road (Brooks 1998), but a different alignment is suggested by the exposure of metalling at Turner Rise during excavations on the Asda site (Shimmin 2008a). A second road forks from the North Gate and turns west at Middleborough, heading towards the temple precinct at St Helena School, where it links up with the late Iron Age trackway there. A substantial part of this road (MON299) was excavated at Middleborough (*CAR* 3, 183, fig 144). The trackway was metalled in the early *colonia* period (MON438) and again after the revolt (MON686) (Hawkes and Hull 1947, 98; Niblett 1985, 5). An earlier road running through Sheepen Dyke dates to the fortress period (MON448) (Hawkes and Hull 1947, 88).

Moving clockwise from the North Gate around the city gates, a road (MON945) is likely to have run north from Duncan's Gate, despite this gate not having been in use for much of Roman period. The alignment is unclear and two observations could refer to separate or later roads. In May 1930 gravel resembling road metalling was observed 30 yards (27.4m) east of the Castle Park boundary and 60 yards (54.8m) north of Duncan's Gate. Its surface was much broken by pits containing human bones (CMR 1931, 7). In addition, Philip Laver noted road metalling at the river Colne, which he took to indicate a ford, in line with Duncan's Gate (Laver nd a, 22.4.1923). The road from East Gate (MON943) has been recorded only once, in 1928, when a trench near Crowther's Factory cut through a road 7.5m wide metalled with gravel, including large stones. It was cambered and about 12in (0.3m) thick at the middle. This lay on a bed of yellow brick earth 10.6m wide and 0.6m thick (Laver nd a, 19.5.1928). The road may have forked north-east of the Colne and

followed the line of the Ipswich Road towards Norwich. In 1930 Laver excavated features near the Ipswich Road which he took to be road ditches (Laver nd a, 11.3.1930).

South of the town a watching brief during an extension built to the south side of Abbeygate House, St John's Green, revealed a layer of tightly packed small stones which may have been part of a north-south road (MON946) (CAR 6, 855). This road perhaps heads towards the south-east gate and is possibly the same as the road (MON947) observed by Rudsdale in 1933 and 1934 when he recorded metalling on the west side of St Botolph's Street, opposite the now-demolished Marlborough Head (Hull 1958, 10). The road from Head Gate (MON821) was recorded during an excavation at St John's Street in 1990 and, as it was observed to cross the backfilled fortress ditch, its construction can be post-dated to c AD 50. A possible footway was noted next to the road (Benfield and Garrod 1992, 23, 33-8). Lastly, in 2007 a small extramural street up to about 4m wide was discovered beneath the remains of the medieval church of the Crutched Friars, running on a south-west-north-east alignment between modern Southway and Crouch Street (Benfield 2008b, 23).

Revetments and bridges

Timber and earthwork revetments for water management and traces of wharves and warehouses for waterborne trade may yet be discovered along the banks of the Colne. Unfortunately, the evidence for such structures to date is unimpressive. In 1957 the old river bed was encountered during work on the site of Last's Garage, north of St Peter's Street (now St Peter's Court), where a row of oak piles with pointed ends was found next to a solid masonry pier around 1.5m thick (Hull 1957). When the site was revisited for a watching brief in 1987 traces of an *opus signinum* floor and other Roman building material were noted (CAT Report 1/87a). An evaluation in 1998 in St Peter's Street revealed a gravel bank or road of Roman date, which separated riverine deposits to the north from Roman make-up to the south. No clear signs of structures were noted, but several large fragments of stone were recovered, including one piece which had been worked on two faces and could have come from a significant building (Benfield 1998c). In 1999 an evaluation in the garden west of 21 Middleborough revealed riverside silts and gravels dating from the later Roman period to the 16th century. Finds were plentiful and included Roman pottery, tile and two large timber pieces which could be part of a timber wharf (Brooks 1999b). East of the town, at the Hythe, evaluation trenches at 9-11 Hythe Quay encountered patches of dumped Roman material, perhaps building platforms or flood defences (interim report in *Britannia* 32 (2001): 362).

The presence of town houses north of the Colne in the 3rd century implies the existence of a bridge. In 1843 William Wire observed the building of the new North Bridge and noted that the northern abutment of the old bridge (built c 1773) concealed a piece of massive masonry and also a Roman burial beneath a wall 'of Roman character' (ELM439) (Wire nd, 31.5.1843, 28.6.1843). However, even assuming that the masonry structure was Roman it need not have been part of a bridge, given the likely movement of the river channel over time. In fact, the evidence above suggests that the water channel would have been to the south of its current line.

Public and monumental buildings and structures

Colchester would have had the full complement of Roman public buildings required for it to operate both as an administrative centre, linking countryside and state, and as a cultural centre, engendering a sense of *Romanitas* within the native privileged classes. The key structures would have been a forum (public square and meeting place), a basilica (town hall

and law courts), public baths, temples, a circus, a theatre and probably an amphitheatre. Other civic structures would have included the monumental arch, pumping house, water and drainage systems, fountains, bridges, aqueduct, storage facilities, utility buildings and other administrative buildings.

The monumental arch

A double monumental arch (MON508) is thought to have been incorporated into the later Balcerne Gate at the western entrance to the *colonia* (see page 109). Although no *in situ* remains of the arch have been encountered, an investigation in 1973 found that the northern wall of the southern Balcerne Gate footway appeared to preserve the shape of the eastern face of the arch (Crummy 1977a, 93–4; *CAR* 3, 122).

INSULA 20

The foundations of a massive building (MON47; Fig 7.2) in this *insula* were encountered during excavations in 1964 and 1989 at East Stockwell Street and the Vineyard Press site (Dunnett 1971a, 38–9; Benfield and Garrod 1992, 26). One stretch of septaria wall measured in excess of 2m wide above foundation level. Internal features included a mortar and septaria drain and a tessellated pavement. The building would have covered an estimated area of 50m by 80m, occupying the whole eastern half of *Insula* 20, and is a candidate for a bathhouse or basilica. That it extended as far as the southern half of the *insula* is suggested by the large foundation and floor surface(s) discovered during the 19th century at 125 High Street (ELM2 and MON45, Wire nd, 25.11.1842, 5.11.1843). A wall seen in 1926 running north–south near the east side of East Stockwell Street could be from the same building (Hull 1958, 159). Also related may be large Roman foundations observed during a watching brief at 1–6 East Stockwell Street in 1995 (CAT 1995/03a PX).

INSULA 29

A substantial Roman building (MON717; Fig 7.2) was encountered in *Insula* 29 on the site of St Nicholas's Church during excavations in 1955–6. The building encroached upon an earlier Roman street (MON720) and some of the masonry walls had been used as foundations for the later church. The surviving walls were part of an extensive building which may have covered most of the *insula*. Several of its walls ran south and west beyond the limits of the church's footprint. Its size and construction suggest that it is likely to have been a public building, although the excavator questioned its level of importance. The walls were faced with coursed septaria and tile, and a layer of brown soil lay between these and a Boudican destruction layer below. The building apparently stood at the end of the Roman period, but its construction date is unknown (Hull 1960, 301–28). During excavations at Lion Walk, at the southern end of the *insula*, large robber trenches (ELM687–686) dated to the Roman period suggested a public rather than a private building, perhaps part of the same building (Fig 7.14; *CAR* 3, 70).

INSULA 30

Insula 30 lies directly to the south of the precinct of the Temple of Claudius, a position that makes it a strong candidate for the location of a public building or buildings, and it has been suggested as a possible site for a forum, a bathhouse or an administrative basilica for the imperial cult. Excavations have demonstrated that a timber and clay block building of some stature stood here before the Boudican revolt and was apparently replaced by a sizeable stone building some time in the later Roman period. A number of undated 'stout' walls of

clay and stone and a tiled floor have been recorded running north–south across Culver Street East, which runs through the middle of the *insula* (Hull 1960, 302, fig 1 nos 160, 183, 49, 50). Also on Culver Street East, a pit dug at Adams Garage in 1948 revealed a series of layers that may have represented up to five sequences of buildings constructed of clay blocks or wattle and daub (ibid, 317). On the site of St Nicholas's Church an excavation in 1955–6 encountered a large wall foundation trench some 2m wide running north–south along the western edge of the *insula* (ELM686; Fig 7.2); no superstructure survived, but the foundation was clearly monumental in scale and lay over a pre-revolt clay block building. Another deeper but narrower wall trench ran parallel to the large foundation and encroached on the early street dividing *insulae* 29 and 30. Hull observed that this could have been a stylobate for a portico (ELM687).

In 1968–9 the digging of stanchion holes for a new Sainsbury's supermarket west of Queen Street was observed, in the south-east corner of *insula* 30. At least four large east–west walls of white mortar and septaria were recovered and a general absence of domestic refuse was noted (Dunnnett 1971a, 100). In 1970 a watching brief in the south-west corner of the *insula* recorded substantial robbed-out walls. The surviving foundations were 7ft (2.3m) deep and consisted of white mortar, septaria and flint. A series of floors were observed which were interpreted as representing an early wooden structure destroyed by fire and a later masonry structure with a tessellated or tiled floor (Crummy 1971, 110, note 21).

The situation along the southern part of the *insula* is confused by the irregular shape of the late Roman street to the south. Street metalling recorded when the original Wyre Street Arcade was built in 1929 demonstrated an irregular alignment that sealed the remains of private buildings and a coin of Carausius (AD 287–93) (CMR 1929, 21–2), and on this evidence Crummy has argued that the public building in *Insula* 30 underwent considerable modification on its southern side in the late 3rd or early 4th century at the expense of private buildings to the south (Crummy 1971, 107). A less likely possibility is that the large masonry building noted in *Insula* 30 was not built until this very late date.

A watching brief at 65 High Street in 1976 noted a north–south drain and possible Roman foundations amidst heavy cellar disturbance (CAR 6, 820). A vaulted drain was also recorded at the north end of the *insula* in 1967 (ELM220). In August 1983 a limited investigation took place prior to the redevelopment of 61–62 High Street on the northern side of the *insula*, a series of stanchion holes revealing Roman floors overlying make-up and rubbish deposits and parts of a massive suspended *opus signinum* floor, evidence which has led to suggestions of a possible bathhouse on the site (CAR 6, 995).

To the north of the *insula* excavations have revealed a layer of cobbles, perhaps from a courtyard linking it with the temple precinct (Drury 1984, fig 11). Drury has suggested that the shape and position of the *insula* make it likely that the buildings here were functionally linked to the imperial cult rather than the civil *colonia*. Buildings here could have been used to meet the bureaucratic, ceremonial and religious requirements of the annual festival organised by the provincial council (ibid, 28–9).

INSULA 31

A substantial multi-phased masonry building (MON745; Fig 7.2) was discovered during excavations at 5 Queen Street in 1966. Above ground, its walls were 0.9m thick. Its second phase saw an extension with buttresses or pilaster bases at intervals along two of the walls. Two mortar floors were also laid, one of which was cobbled. The final building phase saw the enlargement of rooms and insertion of a hypocaust and mosaic floor. Stratified material was almost non-existent, but a 2nd-century date was suggested for the earliest phase. The

building was overlain by a later Roman structure (MON746) (Dunnett 1971a, 87–9).

INSULA 18

Insula 18 is the site favoured for the forum as it lies at the junction of two principal streets of the *colonia*, the *cardo maximus* and the *decumanus maximus*, this being a likely spot for the *principia* of the former legionary fortress. Part of a Roman masonry building (MON819; Fig 7.2) was uncovered along the northern edge of *Insula 18* in 1965: it stood on a thick layer of clay make-up into which were dug the foundations of septaria walls for rooms with mortared floors. After an unknown period the building was remodelled, a floor of black and red tiles in a herringbone pattern was added to one room and another was given a masonry drain. Floors were later renewed with *opus signinum* and lying on these were coins and pottery of the late 3rd and early 4th centuries, along with collapsed debris from the roof (Dunnett 1966, 40).

INSULA 35

A large aisled building (MON608) excavated at Culver Street may have been a public building (*CAR* 6, 112–16). The building encroached on an east–west street, had aisles formed by two rows of columns or piers and must have been at least 45m long and about 17m wide. The foundations, which were about 1.5m across, were heavily robbed, leaving only part of the north wall and some pier or column bases. Dating evidence was limited but pointed to construction some time after c AD 275. In the absence of any floors or distinctive features the function of the building is unclear, and a wide range of uses is possible; a favoured function is that of an agricultural barn (ibid, 115–16). An extension of this hypothesis is the suggestion that the building was in fact a basilican warehouse storing imperial taxes paid in kind (Faulkner 2000, 128–9).

Theatre, Maidenburgh Street

An early theory was that the theatre mentioned in Tacitus' account of the Boudican attack on Colchester may have been located in *Insula 3* based simply on the curvature in the medieval road system (Blake *et al* 1961, 41). However, by 1960 Rex Hull had guessed that walls and marble fragments recorded in *Insula 13* belonged to a theatre (Hull 1960, 301–28, fig 1), and in 1981–2 excavations in Maidenburgh Street confirmed the location of a substantial D-shaped stone-built theatre (MON823; Fig 7.2) in this *insula*. The heavily robbed building was constructed of septaria and tile, and given its external diameter of approximately 71m would have been large enough to accommodate a seated audience of at least 3,000 (Fig 7.8; Crummy 1982b, 299). At some point a substantial rectilinear annexe was added to the theatre's southern end, which survived as a wall 1.2m wide abutting the eastern arc of the theatre. This was no doubt the same wall recorded running down the centre of Maidenburgh Street in 1895 (Hull 1958, 105, No.152).

The building is sited adjacent to the precinct of the Temple of Claudius, mirroring the theatre–temple relationship seen outside the town at Gosbecks. Tacitus records that prior to the Boudican attack on Colchester 'the theatre had echoed with shrieks' (*Annals* XIV), and although this is not conclusive proof of an early date for the Maidenburgh Street theatre, the reference supports the idea that it was established as part of the annexe of the *colonia* in the period prior to the AD 61 revolt. Weight is given to this interpretation by the fact that the theatre appears to follow the orientation of the fortress grid rather than that of the later *colonia*. However, the 1981–2 excavations dated the stone theatre to the 2nd–3rd centuries and failed to produce any evidence of an earlier structure (Crummy 1982b, 299–302). In

1984 a small trial trench dug at the north-west corner of St Helen's Chapel, which sits over the north side of the theatre and incorporates part of the wall of the theatre in its base, did not locate evidence for an earlier wooden structure (CAR 6, 1037).

Gosbecks theatre

The Roman theatre at Gosbecks survives as a mound about 1.5m high. The first excavation on the site by the Revd Henry Jenkins in 1842 failed to establish the building's function (*Gentleman's Magazine*, November 1842, pt 2, 526); this was later deduced by Rex Hull after exploratory trenches were cut in 1948 (Hull 1958, 267–9). A more detailed excavation followed in 1967, when much of the west side of the building was excavated and two construction phases were identified (Dunnett 1971b). The excavation demonstrated that a wooden theatre was initially built and then demolished in the 2nd century; this had a semicircular *cavea* with a passage at ground level leading to the centre of the *orchestra*. The timber theatre was replaced by one of turf and clay encircled by a stone revetment wall. The wall was decorated with pilasters and appeared to have four external staircases or, possibly, buttresses. The theatre appears to have lasted until the mid-3rd century and its capacity has been estimated at around 5,000, which would have made it the largest of its kind in Britain.

In 1977 a small excavation was undertaken by Colchester Archaeological Trust to assess plough damage on the site; this encountered turf blocks from the base of the *cavea* measuring 0.10–0.15m in thickness (Fig 7.20; CAR 11, 103). The theatre was enclosed by its own precinct wall, which can be traced from cropmarks (ibid, fig 6.1). In 2001 the precinct wall was excavated at two points: one profile was V-shaped, while the other was shallower and more ragged (P Crummy, pers comm).

North Station Road

A very large robbed foundation was found in 2003 during an evaluation at the Globe Hotel, North Station Road, to the north of Colchester town centre. Its exceptionally great width (at least 2.2m) and depth (at least 1.2m) suggests that it was for an exterior wall to a Roman public building of at least two storeys. The building's high status is supported by evidence of tiled roofs, heating systems and painted walls. It was demolished, perhaps in the 3rd or early 4th century (CAT report 248).

The circus

In 2000 robbed-out Greensand foundations were observed in a cable trench in the north-west corner of Abbey Field (Fig 7.9). In 2002 another short stretch of similar foundation was noted during evaluation work for the Colchester Garrison development. Subsequently, in 2004, two areas close to Flagstaff House on Circular Road north, produced a pair of parallel foundations of unequal width. In each case the wider of the two foundations had square/rectangular projections, suggesting that they had been buttressed. In the same year excavations near the Cavalry Barracks revealed two more similar foundations 230m to the west, which aligned closely with the foundations already noted. Given the uniformity of alignment, construction and materials, the options for interpretation are limited and the remains have been confirmed to be a Roman circus (MON1055). The use of greensand (Kentish ragstone) suggests that the circus is unlikely to have been built before the late 1st century AD (Crummy 2005b, 3).



Fig 7.7 The Roman drain at St Peter's Street under excavation (Colchester Archaeological Trust).



Fig 7.8 The Roman theatre in Maidenburgh Street as it might have appeared in c AD 275 (© Peter Froste. All rights reserved, DACS 2013).

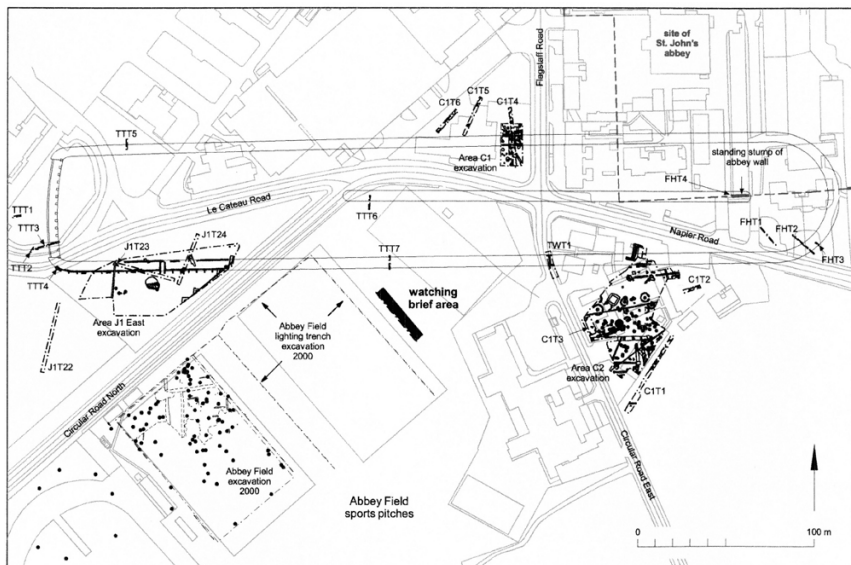


Fig 7.9 Excavations have now revealed evidence for the whole of the plan of the circus, including the central barrier, the running track, the stands and the starting gates (Colchester Archaeological Trust).

It is now believed that the Roman circus at Colchester was 448.2m in length with the starting gates to the west. The width of the circus varies between 71.1m and 74.2m (excluding buttresses), which is at the narrow end of the known range and very similar to sites in Spain and North Africa. It has been calculated that the circus had a seating capacity of around 12,500–15,000 (Crummy 2005a, 267–77). Excavations in 2006 and 2007 revealed that the Colchester circus had eight and not 12 starting gates as previously thought (Crummy 2007a, 6; 2008b, 6–7). To date this is the only confirmed Roman circus known in Britain.

Water supply

Colchester is situated on a spur of the Colne river valley at the point where the glacial sand and gravel terrace meets the underlying London Clay. Here a series of spring lines emerge, some within the northern half of the walled Roman town. However, the bulk of the town sits above the spring line and some kind of pressurised water system would have been required to supply the higher *insulae* (CAR 3, 26–8).

Pressurised timber water mains served domestic and commercial properties, as well as feeding public structures such as fountains and baths. Examples of these mains have been excavated at, for instance, North Hill (Dunnett 1967, 31), Long Wyre Street (ELM484; CAR 6, 358), St Mary's Hospital site (Brooks 2002a, 13–14) and Lion Walk, where an iron water main collar was recovered from a medieval robber trench (CAR 3, 26). This system extended beyond the town walls into suburbs at Balmerne Lane and Middleborough (ibid, 115–17, 179). At Balmerne Lane six water mains were identified, apparently serving properties on the south side of the London road. Each consisted of a series of straight wooden pipes held together by flat iron collars hammered into the wood to create sealed joints. The same site also produced traces of timber-lined water tanks set within clay pits dating to c AD 150–300 (ibid, 141–2). Timber drains dated to the same period were also

found to flank the London Road (ibid, 138). The Balcerne Lane areas seem to have been served with water from the beginning of the *colonia* through to the blocking of the Balcerne Gate in the 4th century.

Within the town walls open timber-lined or occasionally clay-lined drains ran from inside buildings and enclosed yards into street drains that took waste out through the walls into the town ditch via a series of tile-lined arches such as the one still visible in St James's churchyard wall on East Hill. In St Peter's Street, just to the north of the town wall, the continuation of one of these intramural drains was located during excavations in 2007 (Fig 7.7). The drain was 11.5m long, about 0.4m deep and 0.4m wide. The standard of preservation was very high, enabling a dendrochronological sample to be taken by Martin Bridge. Preliminary results indicate that the drain had been made no earlier than AD 61 (Crummy 2008a, 2–4).

More substantial tile-built drains served public buildings and large town houses; these have been identified in, for example, *Insula* 10 (Dunnett 1967, 27; Dunnett 1971a, 8), *Insula* 26 (Hull 1958, 194) and *Insula* 35 (*CAR* 6, 209–10), as well as running north from the 'Mithraeum' out under Duncan's Gate (Hull 1958, 87, fig 38). An elaborate system of masonry drains also serviced the altar in front of the Temple of Claudius (Alcock 2001, 40; Drury 1984, 17). As yet, the source of the pressurised supply has not been identified, although the 'Mithraeum' (MON701; Fig 7.2), sited over a spring line in Hollytrees Meadow, has been proposed as a possible waterworks serving part of the town (Crummy 1980a, 272).

Possible waterworks: the 'Mithraeum'

A substantial five-roomed masonry building (MON701; Fig 7.2) was discovered in Hollytrees Meadow in 1852, and re-excavated in 1927, 1929 and 1954 (Duncan 1858b, 210–28; Hull 1958, 107–13), sited over the highest known spring line within the walled city. A vaulted drain joined the north-east corner of the largest room at floor level. This room was sunken and had several slots in the ground, which may have been for timber partition walls or to hold machinery of some kind. The room also had a sump, and a spring rose in the south-west corner. Iron shackles found in the building may be a rare piece of evidence relating to the use of slaves. Crummy suggests that the building may have been a waterworks, containing water-lifting gear. Hull had tentatively identified the building as a possible 'Mithraeum' and, despite the theory being generally discounted, the name has stuck. He concluded that the building had been deliberately demolished not earlier than the reign of Constans (AD 337–50) (Hull 1958, 112).

Possible aqueduct and extramural mains and wells

The Balcerne Lane excavation revealed traces of a possible aqueduct (MON 408; Fig 7.28) which survived only as two rows of postholes running for 43m and cutting through the remains of a building demolished c AD 80–125. The posts were around 0.2m square and had been placed in post pits 0.6m deep, aligned with a 5m-wide strip of land orientated north-east–south-west. In view of the substantial quantities of water implied by the large number of water mains in the vicinity, and taking into account its plan and the relationship of the Balcerne Lane area to the contours of the town, a plausible explanation is that it was an aqueduct. This potential 'aqueduct' was a relatively short-lived structure and no evidence for an earlier or later version was found, which is curious given that the construction of an aqueduct would have constitute a significant public investment, cutting across property boundaries and having a dramatic impact on the control of water to different zones of the

town (*CAR* 3, 111, 119–21, fig 99).

The water pipes located at Balcerne Lane diminish to the west, suggesting a supply from near or within the town walls to the east. Perhaps a water tower (*castellum divisorum*) stood here in the manner of the later Victorian tower placed on the crest of the hill (*CAR* 3, 28). A V-shaped, clay-lined water channel or conduit, with a rectangular slot at the base for a wooden pipe or wood-lined channel, was recorded during the 2001 excavations on the site of St Mary's Hospital at Balcerne Hill (Brooks 2002a, 13–14). The channel was larger than other water pipes recorded in the town and ran from the direction of Lexden towards the site of the modern waterworks at the foot of Balcerne Hill (H Brooks, pers comm).

Outside the town at Gosbecks, a long water main is known, on the basis of air photographic and geophysical evidence, to run for 250m from north of the site to a structure just east of the portico (Figs 4.8 and 7.20; *CAR* 11, fig 6.1); this structure, of rectangular form, was excavated in 1995 with inconclusive results (Crummy 1996, 7). A 28m-stretch of the water main was also examined; no wood survived, but 16 iron collars were still in position, giving an average length of 1.7m for each piece of pipe. In 1998 another part of the main was encountered on the site of the proposed new visitor centre. The water main passes through a gentle valley where there may have been a waterworks, and an L-shaped cropmark has been noted in this area, although a small trial pit dug in 1998 failed to reveal anything (Benfield 1998b).

A number of medieval and later wells are known from within the town, but as yet no well has been dated to the Roman period. Outside the walls, Roman wells have been identified at Middleborough, where the most complete example was made of oak with chamfered boards dated to the mid-2nd or 3rd centuries (Wire nd, 1.9.1852, 6.9.1852, 1.1.1853; Hull 1958, 107–13; *CAR* 3, 182, 228), and at Sheepen (Hawkes and Hull 1947, 127). In 2007, work at Sheepen, on the Colchester Institute site, revealed two further timber-lined wells, one of which had a basket-like structure in its lower part (Brooks 2008, 11).

Domestic and commercial buildings

This section seeks to summarise some of the principal features of the excavated buildings from the town. The buildings are discussed in chronological order, which seems the most convenient approach. However, the accuracy of the dating evidence tends to vary from structure to structure and is always open for review in the light of new information. Although this section deals with domestic and commercial buildings, in practice these labels can be misleading because structures often had shared or mixed functions.

The late 1st century: the Boudican aftermath

Unlike London and Verulamium, where there is evidence for some limited survival of buildings after the attacks on these towns by Boudica, at Colchester the picture is one of comprehensive destruction. Some stone-built structures, such as the base of the Temple of Claudius and the Balcerne Arch, may have survived intact, and the stumps of some burnt pre-Boudican walls have survived in places. Typically, the fire left a layer predominately composed of burnt daub with some wall plaster and broken tile. Perring has suggested that the limited quantity of tile recovered may indicate that thatched roofs were prevalent at this time (Perring 2002, 120).

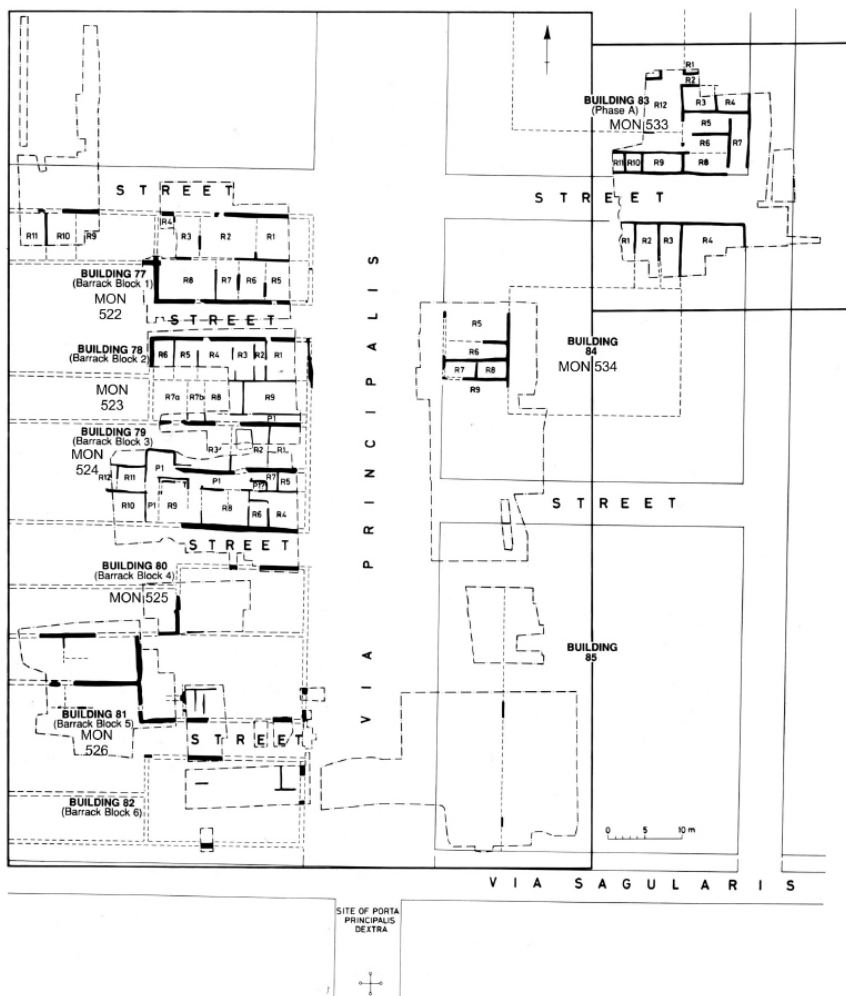


Fig 7.10 Culver Street AD c 44-49 (insert to Fig 7.2) (Colchester Archaeological Trust).

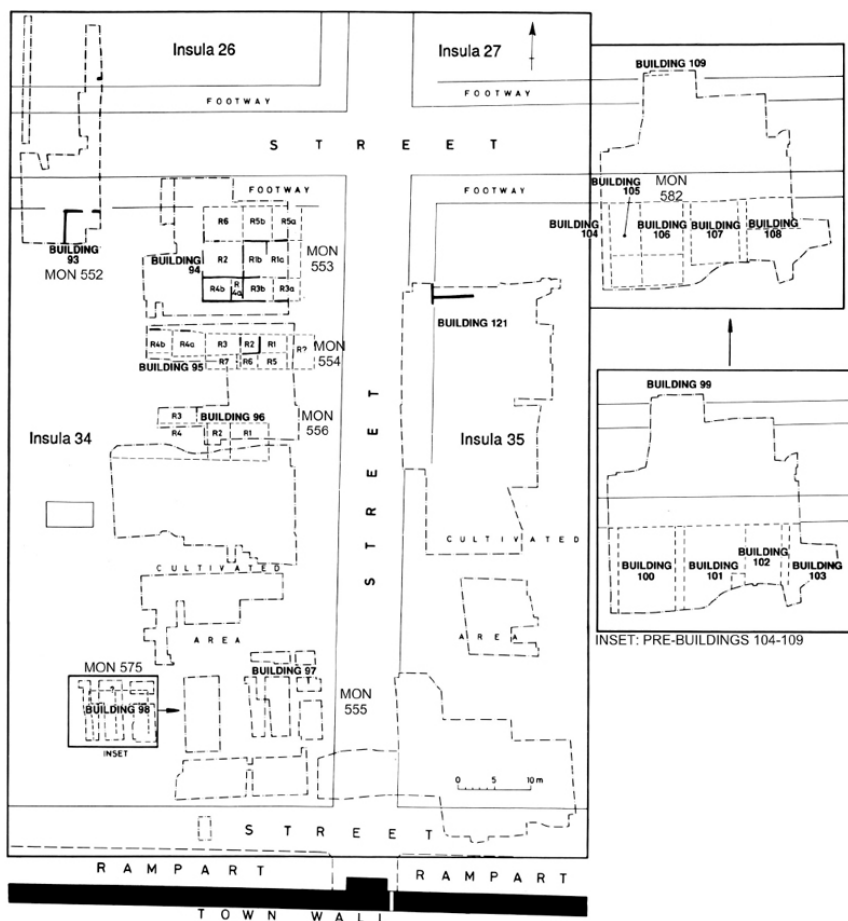


Fig 7.11 Culver Street AD 60/61–c 150/200 (insert to Fig 7.2) (Colchester Archaeological Trust).

Excavations have demonstrated that after the revolt some parts of the town were thoroughly cleaned of this debris and rebuilt, while other areas were left to accumulate midden debris and layers of cultivation soil. Certain plots appear to have been left vacant for over 150 years and it appears that the town never achieved the building density that it had prior to the revolt. The evidence from Lion Walk and Culver Street suggests that in the late 1st century the southernmost parts of the *colonia* (southern parts of *Insulae* 34, 35, 36) were dominated by cultivation or garden plots (*CAR* 3, fig 35; Fig 7.11; *CAR* 6 fig 3.6). Many pre-revolt plot boundaries in the *colonia* seem to have been lost or deliberately altered, although at Culver Street there is some evidence for their reuse in the northern part of *Insula* 34 (*CAR* 6, 27–9, fig 3.5). This could indicate the return of survivors or their families to earlier veteran plots and even the survival of detailed city records, although the excavator would not rule out coincidence as a factor (*ibid*, 29, fig 3.5).

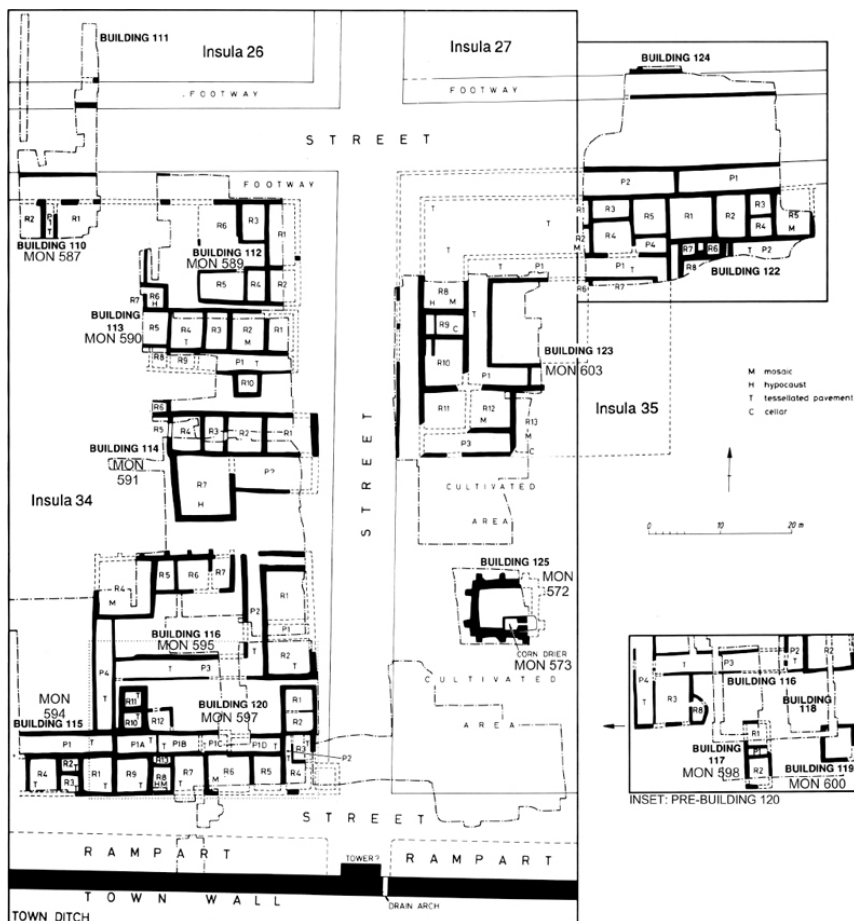


Fig 7.12 Culver Street AD c 150/200 c 275 325 (insert to Fig 7.2) (Colchester Archaeological Trust).

How rapidly did Colchester recover from the impact of the Boudican revolt? The best evidence for post-Boudican rebuilding comes from Culver Street, where new houses appeared within an estimated 15 to 20 years of the revolt, although there is to date no conclusive stratigraphical or dating evidence. One post-Boudican building (MON554; Fig 7.11) sat directly on Boudican destruction levels (*CAR* 6, 30). Elsewhere, recent excavations at Head Street have shown that a pre-Boudican property was allowed to stand for some time as a burnt-out shell before being razed and partially covered over by a new footway (Fig 1.6; Denison 2001, 7)

To date it has not been possible to identify a public building boom in Colchester in the years after AD 69, although the rebuilding of the Temple of Claudius and the complex at Gosbecks may yet be dated to this period. The evidence points to the re-establishment of a working city with buildings that often combined domestic, industrial and commercial functions. The new houses at Culver Street were of modest build and generally of similar size and shape to earlier non-military veteran structures. One of these (MON553; Fig 7.11) provides the best example to date of the new domestic buildings. It was square and

contained six rectangular rooms of different sizes, in which were hearths and sandy clay floors. Although a single structure, it could represent more than one property. The slots for the external walls were of similar dimensions to the internal walls and the only surviving wall section was of stud and daub block type. The walls rested on wooden ground plates, unusually set into rounded slots (*CAR* 6, 67).

Although Flavian-period buildings generally appear to be modest structures there is evidence that this period saw some advances in terms of quality and complexity, such as the occasional addition of reception rooms and porticoes or improvements in the quality of construction and decoration. An example of this comes from a late Neronian or early Flavian house at Balcerne Lane, where a building set back from the main London road had a decorated corridor leading to a larger end room (MON417; Fig 7.28) (*CAR* 3, 119; Perring 2002, 35). However, in general the dominant style appears to be utilitarian rather than ostentatious.

The evidence suggests that a variety of building techniques was employed on these relatively low-status late 1st-century buildings. At Lion Walk one building (MON478) rested on shallow unmortared foundations and had daub walls that had been covered with painted plaster; here one room, perhaps a kitchen, contained three ovens (*CAR* 3, 50). Another Lion Walk structure (MON475) revealed two building phases (*c* AD 60–80 and *c* AD 80–100), with foundations consisting of septaria set in sand (*ibid*, 50, 37). An early 2nd-century building excavated at 21–31 Long Wyre Street (MON1039) had modest unmortared wall footings, although a fragment of thin Purbeck marble wall veneer and a small amount of white painted plaster from the interior suggested that the interior decoration was of high quality (Brooks 2004c, 28). Elsewhere, post-Boudican buildings have been noted with septaria and mortar foundations (MON285, MON951) (*CAR* 6, 136; Dunnett, 1971a, 52–4).

One building technique specific to the late 1st century was the use of gravel-filled foundations, presumably favoured when the ground surface was close to natural and before a layer of occupation debris made such foundations impractical. At Culver Street a series of post pits marked out a row of structures (MON576–580) lining the northern end of *Insula* 35 (*c* AD 75–100). These were demolished within 25 years, to be replaced by new buildings (MON581–6; Fig 7.11) (*c* AD 90–100) built on gravel-packed pits, with little evidence for property boundary continuity. Foundations of gravel were also noted for two buildings (MON554, MON556) at Culver Street (Fig 7.11). One (MON554) had floors of gravel and mortar, the earliest examples of this floor type recorded in the town (*c* AD 75–125) (*CAR* 6, 69). At another Lion Walk building (MON481) well-mixed Boudican debris was used to form floors, and the foundations consisted either of ground plates, post pits or gravel-packed pits (*CAR* 3, 52).

Elsewhere in *Insula* 12, on the Telephone Exchange Site, a new building (MON723) (*c* AD 77–360) had foundation trenches filled with compacted clay and gravel, presumably supporting a timber-framed structure. It maintained the same building line as a pre-revolt building (MON722) (Dunnett 1971a, 12–13). At Long Wyre Street a building (MON619) with coursed septaria and mortar foundations lying over a gravel-filled trench (*c* AD 75–100) contained a hearth and had buttresses on its western side, with internal partition walls set on ground plates (*CAR* 6, 358–9).

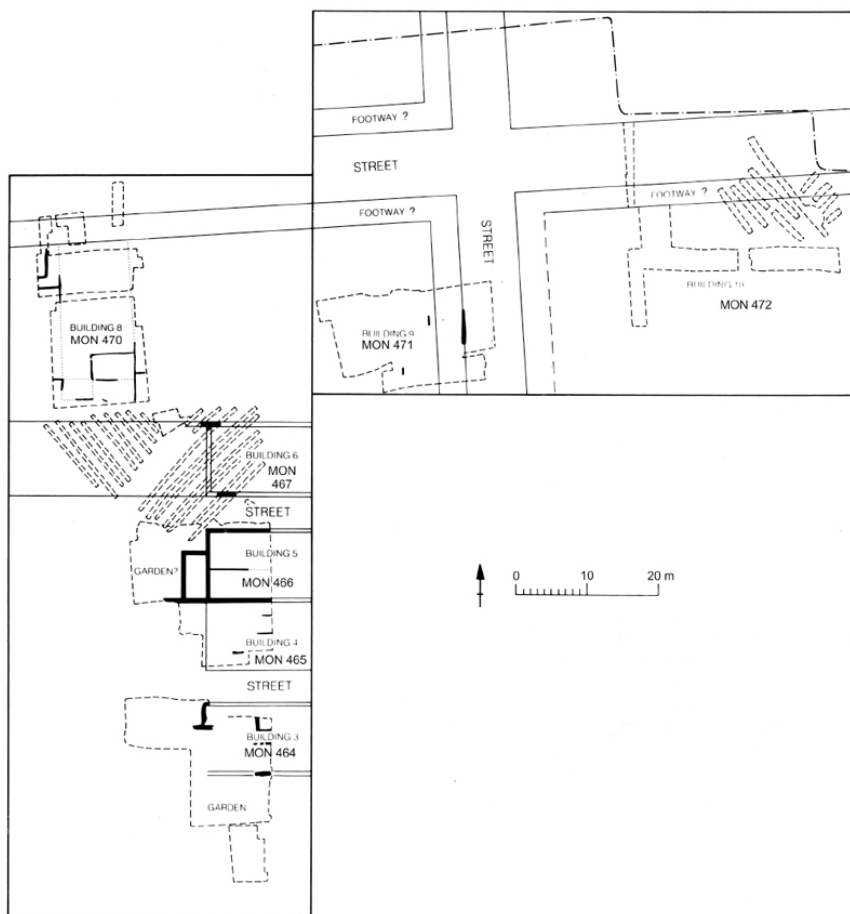


Fig 7.13 Lion Walk AD c 49–61 (insert to Fig 7.2) (Colchester Archaeological Trust).

In *Insula* 10 a building (MON817) excavated at the NCP Car Park on Nunn's Road and dated to c AD 75–100, was built on foundations of septaria, tufa and tile. The use of tufa is unusual and the examples here must have come from damaged public buildings, perhaps the temple precinct or Balkerne Gate arch, both of which were faced with tufa. Underneath this building the Boudican destruction layer was levelled off and there was no evidence for post-revolt build-up. The building, which was simple and rectangular, was divided into two compartments and situated in the angle of two streets, with gravel yards to the north and west. One room may have been a smith's workshop, as it contained slag and a cake of bronze or copper. The building was extended and renovated before its demolition and replacement c AD 100 (Dunnett 1967, 27–33).



Fig 7.14 Lion Walk AD c 100–450 (insert to Fig 7.2) (Colchester Archaeological Trust).

Second-century buildings

The 2nd century appears to have been a period of stability and expansion for the town's traders and manufacturers. Some of them were able to establish separate residences away from their businesses, although some buildings continued to combine both domestic rooms and street frontage workshops. Typical early 2nd-century buildings may have been of only five or six rooms connected by an external portico. These structures were initially built of timber, which ruled out the use of hypocausts. However, they were not necessarily plain and they commonly incorporated glass windows, plastered walls, frescoes and decorative floors. Over time masonry walls were added to certain rooms, to allow the introduction of

underfloor heating. The daub floors of the 1st century were spartan and would have been difficult to clean; these began to be replaced in the 2nd century by plain mortar floors and perhaps wooden floors. The later floors are harder to trace but not unknown (for example, MON413). In the middle and latter part of the century old houses received substantial upgrades and new large town houses were built, some with 20 rooms or more, incorporating high-quality features such as hypocausts and mosaics.

In the early 2nd century three buildings (MON553, MON554, MON556) at Culver Street were replaced by new houses (MON589, MON590, MON591, Figs 7.11, 7.12). These used similar plots to their predecessors, but were more substantial, though not easily identifiable as common house types. The first (MON589) (c AD 100/125–c 275/325) was well preserved and comprised a block of six rooms. It contained a large amount of window glass and painted wall plaster and sat on gravel-packed post bases, greensand and septaria foundations or timber ground plates. The largest room faced the street and contained fragments of crucible used for melting copper alloy (*CAR* 6, 76–8). The second building (MON590) (c AD 100/125–c AD 275/325) probably began as a building of five rooms, expanding to at least 10 over its lifetime; internal features included tessellated pavements and a hypocaust. The building combined high-quality rooms with a workshop nearest the street frontage, and was built on large stone and mortar foundations placed over a layer of gravel. It was upgraded, probably in the late 2nd century, with the addition of a mosaic (*ibid*, fig 3.42). The third building (MON591) was similar to the second (MON590) but lacked floor coverings of any quality; both buildings may have been of single-corridor type or, alternatively, separate wings of one courtyard house (*ibid*, 82). Other poorly preserved buildings from this period have been recorded at Culver Street (MON587–8; Fig 7.12; *ibid*, 75), Long Wyre Street (MON621–2; *ibid*, 359; Brooks 2004c, 28), North Hill (MON818; Dunnett 1967, 36–8) and Head Street (MON1011; Brooks 2004b, 11–13).

In the mid-2nd century the scale of residential buildings dramatically increased with the appearance of large town houses, often laid out around a square or rectangular courtyard. Such houses are rare in the province and may have been inspired by the courtyard houses found in forts (Perring 2002, 40). The new houses made increasing use of masonry foundations and walls, including stone-lined cellars, for example, MON603 in Culver Street (Fig 7.12; *CAR* 6, 96–108) and MON486 at Lion Walk, (Fig 7.14; *CAR* 3, 66–68), although many internal walls continued to be constructed with daub blocks or with wattles placed between studwork panels. Wealth was clearly expressed through the presence of mosaics, tessellated pavements and hypocausts. Some of the new buildings were built on previously open land: for example, at Lion Walk (MON483; Fig 7.14). Only the rear range of this house was excavated, revealing 19 rooms including a kitchen with adjacent garden plots to the north and east. Internal features included tessellated pavements, hypocausts and mosaics, including a distinctive lion design (*CAR* 3, fig 49).

Large late 2nd-century town houses were also recorded in *Insula* 35 at Culver Street. Part of a town house (MON602) was uncovered, revealing a range of five rooms with flanking corridors to the north and south, one of which ran along the road and may have been a veranda or covered footway. The floors were of sandy clay with traces of a mosaic and hypocaust and the foundations were mortar and septaria rubble (*CAR* 6, 95–6). Directly abutting this building to the west was an exceptionally large Roman courtyard house (MON603; Fig 7.12) which was roughly square, measuring around 36m by 40m and consisting of four ranges of large rooms around a central yard. A total of 13 generously proportioned rooms and three passages were uncovered. Most walls were of mortared septaria rubble, several rooms had clay floors and at least one floor was of *opus signinum*. At

least four mosaics and one hypocaust were recorded, as well as traces of window glass and carved stone used for dadoes, wall veneers and cornices. Finds included a finely carved Italian marble table leg with the head of a panther. A probable kitchen contained at least 11 ovens, two hearths and steps leading down to a stone cellar; another sunken room may have been a shrine. In the central yard, a wooden water tank sat in a clay-lined pit and timber drains around the edge of the yard discharged through a passageway into the street (Hull 1958, 209–10; *CAR* 6, 96–106). Such compact Italian-style houses are rare in mid-2nd century Britain and may suggest occupants of continental origin (Wacher 1995, 125).

At Lion Walk, a courtyard house (MON484; Fig 7.14) of late 2nd-century date in *Insula* 36 was of two phases, the second being marked by the introduction of mortared foundations and the laying of tessellated pavements in many rooms. The stumps of internal daub walls survived *in situ*, often with plaster still adhering. Four rooms along the street frontage were examined; two of these were workshops, while the other two were of better quality. A central yard was inherited from earlier structures and contained a number of possible votive deposits consisting of small pits filled with charcoal-rich soil and, elsewhere, small pots buried upright (*CAR* 3, 62). Another late 2nd-century building, perhaps another courtyard house (MON51), fronted onto the north–south street along the western side of *Insula* 20 (Shimmin and Carter 1996, 37–8).

In *Insula* 10 the southern range of a building (MON818; Fig 7.2) running parallel with the street was expanded and incorporated at least three mosaic panels of mid-2nd century style. A large wall divided this range from rooms to the north, which were situated on a terrace 1.5m lower down the hill, presumably linked to the southern range by steps (Dunnett 1967, 36–8). The mosaics observed in *Insula* 10 at Crispin Court (ELM264; Hull 1958, 97) and behind the Chase and Pair, both on North Hill (Wire nd, 3.5.1855) may have belonged to this building as they are stylistically of the 2nd century. Masonry foundations found on the Telephone Exchange Site in 1965 may also be from this building (Dunnett 1967, 27). If so, in its final form, it (MON818) may have encompassed almost two-thirds of the *insula* and measured upwards of 70m by 50m.

Lower down the hill a well-preserved town house or public structure was built in *Insula* 2 in the 2nd century (*c.* AD 150). The building incorporated mosaics, a hypocaust and a substantial wall of tile courses and septaria (ELM1108; Hull 1958, 79). Another 2nd-century masonry building (MON844; Fig 7.2) in *Insula* 2 incorporated at least two rooms with red tessellated pavements and a mosaic (Blake 1964). In the adjacent *Insula* 1, excavations in 2003 and 2005 at the Sixth Form College (formerly the Gilberd School) revealed evidence of part of a mid-2nd-century and later courtyard building comprising a north corridor, south corridor and south room with evidence for tessellated floors (ELM1362–3; Fig 7.15; Brooks 2005a, 7). Nearby was a semi-sunken room measuring 4m by 7m internally, with a plain red tessellated floor and painted plastered walls surviving to a height of 1.3m. A bench, rendered in *opus signinum* ran round the edge of the room, and set into the centre of the floor was a shallow pool or basin fed by a wooden water pipe. The room has been interpreted as being part of a bathhouse, perhaps the *apodyterium* (changing room), of a *mansio* or inn which may also be represented by the adjacent courtyard building (Figs 7.15, 7.16; Holloway 2006, 14–17; Brooks *et al* 2009).

On the other side of town in *Insula* 39 a mid–late 2nd-century building (MON753; Fig 7.2) consisted of a north–south tessellated corridor flanked by rooms to the east and west, some with tessellated floors and red and green plastered walls. The east wall of the corridor was built of faced septaria with a rubble core and sat on a foundation of broken flue tiles, *opus signinum* and mortar. A pebbled surface set in mortar may have represented an external

yard or courtyard (Richardson 1961, 11–12). In addition, several other probable 2nd-century buildings with hypocausts have been noted in the town (MON754, MON755, MON752, MON787; Fig 7.2; Hull 1958, 115; Richardson 1961, 9–11, 13–15; *CAR* 6, 369). North of the precinct of the Temple of Claudius in *Insula* 6, Wheeler excavated a series of large town houses which he dated to the 1st century but are more likely of Antonine date (AD 138–61) (MON567, MON568, MON569; Fig 7.2; Wheeler 1921, 7–41). Other more modest existing structures were upgraded at this time: for example, one building (MON1040) excavated at Long Wyre Street had its clay floors replaced with pebble-in-mortar floors which sealed a foundation deposit of two pots accompanied by beef and pork scraps (Brooks 2004c, 28–9). Later in the 2nd century this building was replaced with a heavily robbed building (MON1041) that may have been associated with commercial cooking (ibid, 115–16).

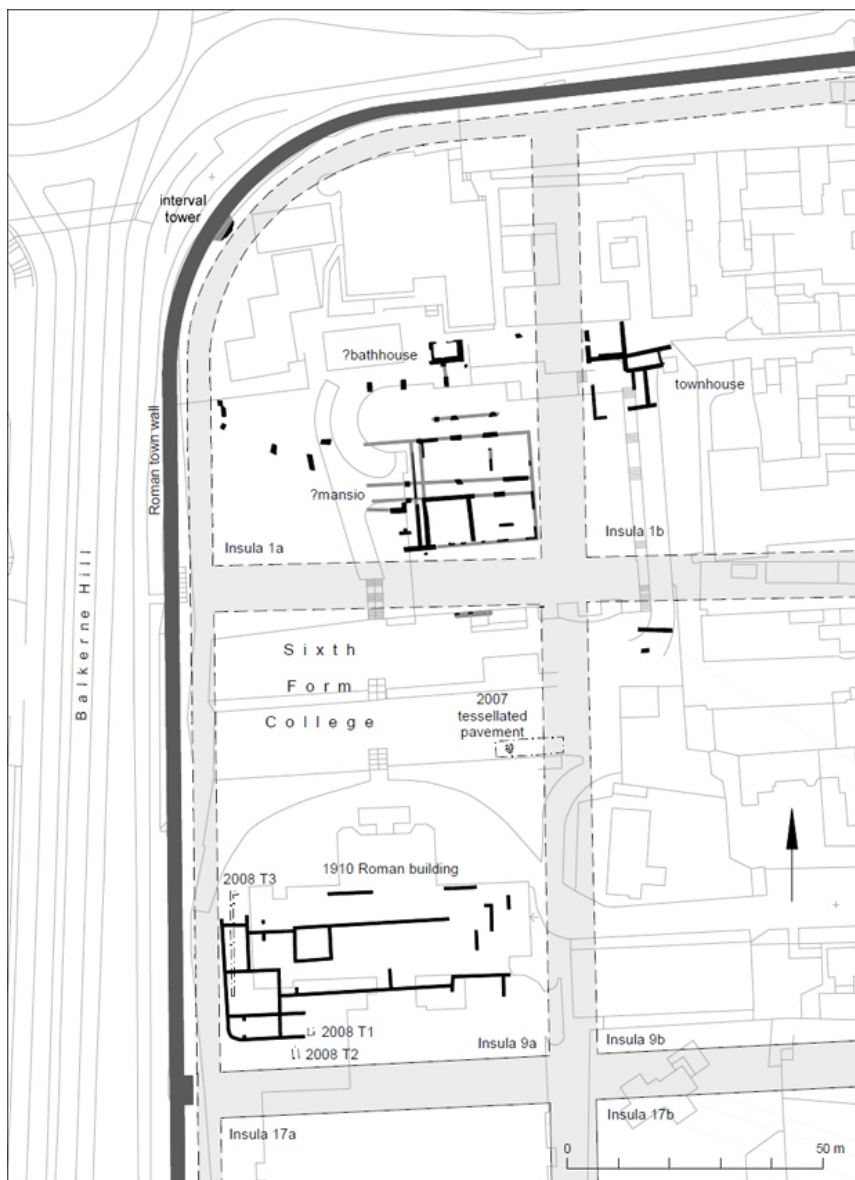


Fig 7.15 Bathhouse and town houses at The Sixth Form College (Colchester Archaeological Trust).



Fig 7.16 Bathhouse at the Sixth Form College under excavation (Colchester Archaeological Trust).

A large group of less elaborate buildings of late 2nd-century date have also been recorded, some commercial in character. A simple two-roomed structure (MON751; Fig 7.2) which was excavated at Lewis's Gardens in *Insula* 40 had a superstructure that was probably built of timber; the internal partition wall was almost certainly of wattle and daub. The north room had a floor of pebbles set in mortar, the other a floor of *opus signinum*. At some point in the 2nd century the building was demolished (Richardson 1961, 9). A group of three utility buildings of lesser status dating to the mid-late 2nd century were recorded at Culver Street at the southern end of *Insula* 34 (MON555, MON575, MON599; Fig 7.11). A small timber-framed structure (MON555) was sited adjacent to agricultural land and fronted onto the former *via principalis*. Its sandy clay floor was covered with charcoal-rich occupation debris, a hearth and a series of at least four ovens (*CAR* 6, 70–1). A second structure (MON575) encroached onto the north side of a narrow east–west street (MON532) and survived only as a collection of postholes and post pits with a hearth or oven; a central partition was denoted by five postholes. The plan mirrored that of a later building (MON599) and could be an earlier phase of it (*ibid*, 69). Another utilitarian building was recorded in *Insula* 35, where a small, buttressed, stone structure stood on greensand and septaria foundations. It measured 5.5m by 7m and was built in the middle of the cultivated area during the 2nd century. From its plan and context it was almost certainly a tower granary (MON572; Fig 7.12; *ibid*, 108).

The possibility of fires in the town during the mid-2nd century has been discussed (Dunnett 1971a, 3–4; 1975, 53; Drury 1984, 29–30) and linked to wider disturbances in Essex during this period (Rodwell 1975, 93). Subsequent excavations have failed to provide evidence of any widespread fire from this time (*CAR* 6, 18) and Crummy suggests that a Boudican origin for such layers cannot be ruled out (*ibid*, 835).

Third-century buildings

The construction of large town houses continued into the early 3rd century: in *Insula* 25 a one (MON737; Fig 7.2) was built in *c* AD 200. Part of its western boundary was excavated at St Mary's Rectory and, if other tessellated pavements and walls observed in the rectory garden are from the same structure, it would have occupied much of the southern end of the *insula* (CAT Report 1/96a; CAT Report 6/97a). The solid foundations were of mortar and septaria chips. Above them the one remaining stretch of surviving wall was built of identical materials to the foundations but faced with dressed ashlar blocks of septaria. Internal features included a 'cobbled' or tessellated floor and traces of red and cream painted wall plaster (Dunnett 1971a, 67).

At the southern end of *Insula* 34 a series of short-lived utilitarian structures were in use *c* AD 200–25. A two-roomed structure (MON598; Fig 7.12) contained a circular oven and associated food refuse – for example, elongated wheat grains – suggesting that this was a corn-drying oven (*CAR* 6, 88–9). A nearby building (MON599; Fig 7.12) contained an oven, traces of a wooden water storage tank and a pit lined with *opus signinum* and tiles, probably also for water storage (*ibid*, 89–90). Adjacent to this was a single room structure (MON600; Fig 7.12) with three ovens that contained traces of oak, birch, hazel and alder used to fuel the ovens (*ibid*, 90). Perhaps around *c* AD 225 a large building (MON595; Fig 7.12) was constructed on the cultivated area in *Insula* 34. This was of unusual plan and developed from a simple two-room structure on the street frontage into an eight-room town house with three passages built around a yard (*ibid*, 83–4). It was dominated by two long corridors without flanking rooms; the corridors may have been more like portico structures and may have formed part of a larger building together with the adjacent structure (MON594; Fig 7.12). This was built to the rear of the town rampart and included tessellated pavements which were unusual in that the *tesserae* were a variety of colours mixed randomly for effect (*ibid*, 83).

In the early part of the 3rd century, but post-dating MON594, a large house (MON597; Fig 7.12) of winged corridor type was built, replacing the utilitarian buildings in *Insula* 34. The core of the house occupied a plot traceable back to a barrack block (MON467), but with two wings encroaching on neighbouring plots and the nearby street which was tolerated, perhaps because the street was a cul-de-sac. The house had underfloor heating, glass windows and mosaics, and contained a very high-quality tessellated pavement. One mosaic was allowed to be covered up by a series of occupation layers before the building was demolished in the late 3rd century (*ibid*, 90–5).

There is less evidence from the end of the 3rd century for the construction of new high-status town houses. The exception may be two structures at Lion Walk in *Insula* 37 (MON488, MON489; Fig 7.14) dated to *c* AD 275–*c* AD 400, the later levels of which were only superficially examined. Two rows of narrow rooms and two gravel yards were identified. Internal features included tessellated pavements and among the finds were box flue tiles, suggesting a hypocaust system. One room containing patches of burnt daub and charcoal, along with two small furnaces or ovens, was probably a workshop facing the street; a small quantity of tap slag was recovered from another room (*CAR* 3, 69).

Other smaller structures from this period include a simple two-room structure (MON680; Fig 7.2) in *Insula* 37 excavated at Lion Walk Reform Church and dated to *c* AD 200–400 (*CAR* 6, 381). A building (MON640; Fig 7.2) excavated at the Cups Hotel Site had a cellar, built *c* AD 225, which produced a quantity of window glass (*ibid*, 333). Another small timber-framed building (MON287; Fig 7.2), excavated at the Gilbert School and probably of two rooms, was constructed near the north-east corner of *Insula* 17a

in the latter part of the 3rd century (ibid, 137). And yet another small timber-framed building (MON626; Fig 7.2) was built at the same time in Long Wyre Street (ibid, 361).

Substantial buildings do not appear to have been demolished or abandoned during the early 3rd century; rather, this appears to have been a time of expansion, although a number of smaller structures went out of use around this time (MON639, MON555, MON575, MON754). At the end of the century a more definite trend towards demolition can be identified, including of some large town houses. For example, excavations at 21–31 Long Wyre Street in 1998 encountered the remains of a substantial town house (MON1042; Brooks 2004c, 30) that may be the same structure as building MON623. The deep rubble and mortar foundations were heavily robbed, but traces of tessellated and *opus signinum* floors were noted, along with fragments of walling consisting of septaria and *opus signinum* lumps in brown mortar. Colourful wall plaster and Purbeck marble veneer were also recovered. The building was evidently demolished in the late 3rd or early 4th century (Brooks 2004c, 26, 30–31).

At Lion Walk, the deliberate demolition of a substantial courtyard house (MON484; Fig 7.14) was dated by several 3rd-century coins in the demolition layers, although a 4th-century coin was also found, leaving room for doubt (*CAR* 3, 62–6). Another structure of several rooms and with tessellated pavements (MON485; 7.14) also showed signs of demolition, but dating evidence was poor (ibid, 66). Other buildings which may have been demolished before c AD 300 are recorded from elsewhere in the town centre, including at Angel Yard, on the High Street (MON51; Shimmin and Carter 1996, 37), Lion Walk (MON482 or Building 18; *CAR* 3, 52), Culver Street (MON588, MON597; Fig 7.12) and the Gilbert School (MON285; Fig 7.2; *CAR* 6, 136).

Fourth-century buildings

There appear to be clear signs of contraction and decline of the building stock in the 4th century although caution is required, as later Roman levels have been more vulnerable to post-Roman disturbance. Nevertheless, the data points to a significant decline in construction work. A number of buildings were repaired and maintained into the mid-4th century, and some even extended, but the decline in use of a number of public structures is accompanied by the appearance of rubbish pits cut through the floors of previously high-status town houses. Furthermore, evidence for occupation in *Insulae* 1–10 is almost completely lacking for the 4th century, with the exception of the *insulae* adjacent to the north gate, as if the northern part of the town ceased to be a residential zone. Elsewhere in *Insula* 35, a 4th-century aisled barn and agricultural land replaced the prestigious town houses. At Culver Street a period of demolition lasting perhaps 50 years saw at least eight substantial houses removed without replacement. One possibility is that settlement was increasingly centred on the principal streets (the equivalents of Head Street and High Street), anticipating the later medieval layout of the town (Crummy 2001, 118). Crummy has suggested that the contraction of building stock could mean smaller and denser living spaces rather than population decline *per se*. There is a reluctance to accept the idea of population decline without more evidence, given the presence of a sizeable 4th-century cemetery at Butt Road.

To date, a handful of high-status buildings have produced evidence of late refurbishment dating to the 4th century. One building (MON730; Fig 7.2) in *Insula* 1b was extensively refurbished, with a distinctive new wall of pale mortar and septaria resting on foundations made up of loose chips of septaria. The enlarged rooms of the house had been floored with rough *opus signinum*; after considerable wear had occurred these had been

replaced by neatly laid plain red tessellated pavements. The make-up of one of the *opus signinum* floors contained a plated denarius and late-Roman painted pottery, dating the floor to the early 4th century or later (Dunnett 1971a, 45). At 5 Queen Street two stratified body sherds of 4th-century colour-coated ware were found in the make-up of a final phase of a large public building (MON745; Fig 7.2). This evidently incorporated a mosaic and a hypocaust, and was thought by the excavator to be a public structure. Another possible public structure (MON858) in *Insula* 30 underwent considerable alterations on its southern side in the late 3rd or early 4th century (Crummey 1971, 107). Elsewhere, at Lion Walk, a courtyard house (MON483; Fig 7.14) was extended, probably in the 4th century, with new rooms constructed on its northern side on a slightly different alignment from the rest of the house (CAR 3, 52–4). A mosaic of high quality, dated to the 4th century, was laid in this building; later a mosaic of lesser quality was added (*ibid*, 62).

The only new building of stature dating from this period appears to be a non-residential structure built in *Insula* 35 (Culver Street). This large rectangular masonry building (MON608) was erected in the late 3rd or early 4th century and continued in use for perhaps over a century. There was no evidence for internal ornamentation and the building stood in an area of wasteland or allotments, leading the excavator to suggest that it had an agricultural function, possibly as an aisled barn (CAR 6, 112–116).

Other probable 4th-century structures that have been encountered have been slightly built and poorly preserved: for example, a flimsy clay-floored building (MON746) was noted at 5 Queen Street (Dunnett 1971a, 89). Few buildings have produced clear evidence for late 4th-century occupation, but there are a few candidates. A building (MON640; Fig 7.2) on the Cups Hotel site had a cellar or basement which, after c AD 350, was infilled with a build-up of sandy clay floors sealing significant quantities of Roman pottery and coins (CAR 6, 333). A well-built town house (MON753; Fig 7.2) in *Insula* 39 may have been occupied into the later 4th century (Richardson 1961, 12), and other large town houses at Culver Street (MON594; Fig 7.12) and Lion Walk (MON483; Fig 7.14) may have also survived into the later 4th century, but clear dating evidence was lacking (CAR 6, 82–3; CAR 3, 52–4). At the Gilberd School a smaller two-roomed timber-framed building (MON287; Fig 7.2) contained late 4th-century pottery (CAR 6, 137).

In some instances 4th-century occupation appears to have taken the form of the use of semi-derelict buildings. For example, a domestic rubbish pit was found dug through the floor of a large town house (MON737; Fig 7.2) in *Insula* 25 (Dunnett 1971a, 68). In *Insula* 10 a building (MON818; Fig 7.2) had rubbish pits dug through mosaics and tessellated pavements; the pits contained bones, shells and 4th-century pottery (Dunnett 1966, 38). Large numbers of buildings appear to have fallen out of use by the mid-4th century; some were demolished, others allowed to decay. The cellar of a building (MON486; Fig 7.14) at Lion Walk was backfilled in the 4th century; its fill contained 10 well-stratified coins, the latest of which was minted in AD 330–5 (CAR 3, 66–8). At least three other structures at Lion Walk appear to have been allowed to decay (MON483, MON488, MON489; Fig 7.14). At Culver Street four houses (MON604, MON602, MON595, MON594; Fig 7.12) may have lasted into only the first quarter of the 4th century and four large town houses (MON589, MON590, MON591, MON603; Fig 7.12) appeared to have been deliberately demolished c AD 275–325.

The evidence from Lion Walk and Culver Street tells us much about the growth and decline of town houses in the backstreets, where space does not appear to have been at a premium, but Colchester has not seen large-scale excavations located along the frontages of the principal streets, although there have been a number of smaller digs, for example at the

Cups Hotel and Angel Yard. At Verulamium, Frere has noted strip houses from the late 3rd century fronting a principal street in *Insula XIV* and remaining in use until the mid-4th century (Frere 1972, 98). No such properties have been recorded in Colchester and the question of a 4th-century decline remains open, even if the current evidence weighs in on the side of decay and contraction. There is no convincing evidence for 5th-century structures from any excavation to date.

Decline and collapse

Late 4th- and early 5th-century evidence from Colchester is scarce and the pattern and speed of the city's decline is difficult to estimate. Possible late burials within the walls have already been noted, while other evidence for late Roman activity includes sherds of late Roman shelly ware found in a deposit sealing the demolition debris of a building (MON484; Fig 7.14) at Lion Walk (*CAR* 3, 63–6). Elsewhere, late 4th-century pottery assemblages have been recovered from the precinct of the Temple of Claudius (Going in Drury 1984, 46–9) and the Cups Hotel (*CAR* 6, 333; *CAR* 10, table 8.2). A coin hoard found in 1964 in the vicinity of Artillery Folly, near the Roman church on Butt Road, contained 15 clipped silver coins of Constantine III (AD 407–11). The discovery of burnt layers during excavations at Duncan's Gate in 1853 and 1927–9 led to the colourful suggestion that these resulted from brushwood placed against the gate by Saxon invaders (Hull 1958, 40). However, as the gate was probably blocked off by *c.* AD 300 this seems unlikely (Crummey 2001, 130–1). There was no conclusive proof for 5th-century occupation of any Roman structures at Lion Walk or Culver Street, although it is possible that later layers were truncated by post-Roman cultivation. The possibility that the possible corn-drying oven (MON573; Fig 7.12) at Culver Street was built by a sub-Roman community is discussed in the next chapter (*CAR* 6, 108–12; *CAR* 7, 25).

Manufacturing and trade

From the fortress period onwards Colchester had been a centre for manufacturing and an important distribution centre for goods from abroad. There is some evidence that the impact of the Boudican revolt may have damaged this position: for example, before *c.* AD 60 *terra nigra* potters' stamps from across Britain are often also found at Colchester, suggesting that this was the main port through which Gallo-Belgic wares were imported. This pattern appears to break down after the revolt and there is evidence that some Roman towns – for example, Exeter – may have imported Gallo-Belgic wares directly after AD 60 (Rigby 1979, 190). However, the comparative frequency of clay lamps in London and Colchester, rarely used elsewhere in the province, suggests that Colchester was still closely linked to the main military supply routes after the revolt (Whittaker 1989; Perring *et al.* 1991, 50; Eckardt 2002b, 153). Furthermore, aspects of the material culture from Colchester, such as gold rings and intaglios, suggest the presence of an affluent population (Henig 1978, 61–2).

The coin evidence indicates that Colchester had a good supply of early high-value coins associated with the military presence, although it is not now thought that Claudian copies were produced at the town to provide soldiers in the province with smaller denominations (Besombes and Barrandon 2000). The large-scale excavations in the town between 1971 and 1979 produced 3,029 coins, to which can be added those excavated from the 1980s onwards and a museum collection in excess of 8,140 (Reece in *CAR* 4, 17–23).

More hearths and ovens are recorded in Colchester, Verulamium and London in the late 1st century than for any later period. While many would have been used for heating and cooking, this could be indicative of an initial formative period of industry and growth

(Perring 2002, 41) or may simply reflect a shift towards the use of raised braziers with the later introduction of mortared and tessellated pavements (*CAR* 3, 25). The replacement of modest residences associated with commercial or manufacturing activities with finer town houses in the 2nd century points to the economic success of the mercantile and manufacturing classes in the city. Tracing this class into the later centuries is harder because of the limited sample of excavations from the principal street frontages, where later shops and businesses may have been located.

It is difficult to do justice to the myriad professions and trades that must have been practised in the city. The evidence for specific industries is considered below.

Pottery production

The pottery industry at Colchester clearly played an important role in the local economy and for a time engaged in significant provincial trade. The pottery industry revived fairly quickly after the Boudican revolt. Coarse ware production is difficult to date, but it is possible to demonstrate that coarse ware types introduced during the pre-revolt *colonia* remained in production after AD 60/1. During the late 1st century a Colchester fine ware industry developed a regional market in Essex and Suffolk and by the late 1st century Colchester colour-coated fine ware products were reaching London in small numbers, becoming more significant in early Antonine contexts (mid-2nd century) and reasonably common thereafter (Davies *et al* 1994, 122).

A kiln (MON298) excavated at Middleborough, dated to *c.* AD 80–110, produced mortaria, flagons and rouletted pedestalled jars (*CAR* 10, 493; *CAR* 3, 182–3, fig 171; Swan 1984, 92). During the early 2nd century mortaria production at Colchester suffered at the hands of Verulamium, but survived to enter its strongest phase during the mid-2nd century to *c.* AD 200, when significant quantities of Colchester mortaria, Black Burnished Ware (BB2), colour-coated ware, fine grey ware and flagons, as well as small amounts of samian were produced (*CAR* 10, 494–6),

In the mid-2nd century a large group of kilns was established west of the town. Eleven kilns were excavated in 1933 and 1959 at Warren Field (MON435, MON449–55, MON691–3) (Hull 1963, 13–144, figs 9–76). These mainly produced samian, mortaria and colour-coated wares, and included, 500m to the west of the town, the only excavated example of a samian kiln in the British Isles (MON454; *CAR* 10, 494). The evidence suggests that some of the Colchester samian potters were migrants from east Gaul, where they are known to have produced pottery at Sinzig (Hartley 1977, 256–7; Simpson 1982, 149–50). Their decision to relocate may have been misjudged, as very little locally produced samian pottery has been recovered from the *colonia* and it appears that the industry was not very successful. Analysis of the hundreds of fragments of samian moulds has suggested that 14 named potters worked from the town (Tyers 1996, 114, table 32); the local samian was evidently of good quality and the reason for its lack of success remains a mystery (Denison 2001, 7).

The Warren Field kilns produced other fine wares, including colour-coated wares, mica-gilt wares and fine red and white wares. These wares are not found in any quantity in the *colonia*, and evidence for regional export is also scarce, although a barbotine colour-coated beaker from Colchester has been found on the Antonine wall (*CAR* 10, 494; Gillam 1961, fig 15, 80). Fine ware production at the Warren Field kilns continued into the late 2nd century.

A group of three late 2nd-century kilns (MON644, MON645, MON646) was excavated at Oaks Drive in 1973. These produced mortaria, colour-coated beakers and some

coarse wares (*CAR* 6, 338–40, figs 13.21–13.22). The presence of forms not found on the Antonine Wall indicates that production at Oaks Drive continued after AD 163 and possibly into the early 3rd century (*CAR* 10, 495–6). Elsewhere, the discovery of pottery and wasters in the Butt Road cemetery points to a kiln or kilns being located in the area, datable by the presence of pottery form *Cam.* 306 to the late 2nd century, (*CAR* 9, 25–6; *CAR* 10, 496).

In the 3rd century the pottery industry lost much of its military market but continued to feed local demands (*CAR* 10, 496). Hull dated a number of Colchester kilns to the 3rd century, but the dating is not conclusive. Five kilns (MON703–7) at Warren Field were dated to *c.* AD 300 and a sixth (MON783), observed in 1959 at Endsleigh Court Road, was dated to AD 250–300. Other kilns (MON848, MON849) excavated at Endsleigh School in 1959 were also dated to *c.* AD 300, but Symonds has suggested a revised date in the early to mid-3rd century (*CAR* 10, 496). Local assemblages show that colour-coated ware was still produced in Colchester during the later 3rd century, but the decline of the industry is demonstrated by its absence even in local centres such as Chelmsford. Instead exports, such as Nene Valley wares and Hadham red wares, became popular (*CAR* 10, 496).

Evidence for 4th-century production is scant; grey wares may have continued to be produced locally, but no kilns can be firmly dated to this century. Hull suggests a 4th-century date for kiln 25 (MON814) at Endsleigh School; however, Symonds prefers a late 3rd-century date. By the mid-4th century, shell-tempered ware imports are found, along with Eifelkeramik/Mayen ware, which continued to be supplied to the city until the end of the century (*CAR* 10, 496–7).

Traces of other kiln sites have been found within the dyke system. In 1933, during the extension of Queens Road, a large amount of pottery of homogenous appearance, probably from a nearby kiln producing grey wares of form *Cam.* 268, was recovered (Hull 1963, 175). In 1934, a large spread of pottery (FND320), thought to be linked to kiln or kilns operated by the potters working from kilns MON435, MON449 and MON459, was found at 105 Crouch Street (Hull 1963, 176, Kilns 15–17) and, in 1938, a large quantity of pottery similar to that found at the 1933 Warren Field kilns was found in Crouch Street (FND247; CMR 1944, 17; Hull 1958, 248). North of the town a spread of *amphora* and mortaria sherds dated to *c.* AD 200 at the corner of Margaret Road and Serpentine Walk, may be from a kiln (FND135), while, to the west of the town, the remains of *sigillata* pottery and fragments of vitrified kiln-wall and clay blocks found in Fitzwalter Road suggest a number of kilns (MON781, MON782) (Hull 1958, 248–9). Possible kilns have also been noted at Oaks Drive (MON758) (*CAR* 6, 811–12), Lexden Lodge (MON767) (CAT Report 9/93c), Mill Place on Butt Road (MON985) (Wire nd, 7.11.1843), Lexden Road (MON798) (CMR 1937–44) and St Mary's Rectory (MON811) (Holbert 1966, 14). Further afield, kilns are known to have been operated at Ardleigh, where an industry producing stylistically similar pottery forms to Colchester operated in the 1st and 2nd centuries (Going and Belton 1999, 33, 154–7). More detail on Colchester pottery production can be found in *CAR* 10, including the survey in Chapter 8.

Various household and personal items were made in the kilns in addition to pottery vessels. There is evidence for a number of clay objects being manufactured in Colchester, such as candlesticks, an artist's palette, face-masks, lamps and lamp holders (Hull 1963, 108–10; Eckardt 2002a and b). Terracotta plaques with moulded reliefs have been noted at Sheepen, St Mary's Hospital and near the precinct of the Temple of Claudius (interim report in *J Roman Stud* XXII (1932): 212; Hawkes and Hull 1947, fig 66.2; Hull 1958, pl XXXa). Additionally, antefix designs from Britain often display local stylistic traits and may

have been locally produced: two examples in red clay from Colchester, which came from the same mould, show a Medusa design (Toynbee 1964, 430; Hull 1958, 209, pl XXX).

Tile and lime kilns

Two tile kilns (MON775, MON774) were excavated at Moat Farm, north of Sheepen, in 1969–70 (Holbert 1971, 22–34; McWhirr 1979, 129–30). They were both of the rectangular up-draught type with sloping-bottomed lateral flues. Both date to the second half of the 1st century. Another tile kiln may have been operated nearby, as a large amount of tile was recovered during fieldwalking (FND265; Fawn 1983, 36; interim report in *Britannia* 28 (1997): 433). Closer to the city, at Sheepen, brick and tile was found over a wide area during the major 1930s excavation, and a tile clamp (MON865) and tile kiln (MON437) were excavated. Clay was extracted from the Sheepen site and tiles were evidently manufactured in a number of areas, the dominant forms being roofing tiles of *tegula* and *imbrex* type (Hawkes and Hull 1947, 71, 107, 115). The excavators believed that production commenced with the foundation of the *colonia* rather than the fortress, but their interpretation may have been coloured by their belief that Colchester was founded as a temporary legionary base rather than a permanent fortress like Mainz (ibid, 347). Elsewhere, William Wire noted a ‘brick kiln’ in Queen Street which he erroneously associated with the construction of All Saints’ church (Wire nd, 20.9.1848; MON614), and a poorly located kiln (MON703) recorded in 1877 may have been used to produce tiles (Hull 1963, 3; McWhirr 1979, 126–7). An evaluation south of the Victoria Inn on North Station Road produced a box tile fragment stamped using a 2nd-century die also known from London and Canterbury. This could suggest that not all of Colchester’s tile needs were locally supplied (Black 2001, 12). However, tile kilns were also present at rural sites in the hinterland: for example, a possible tile kiln is recorded at Mount Bures, 12km from the town (EHCR9214; Holbert 1972, 19–22; McWhirr 1979, 132–3).

There is little evidence for Roman lime production in Colchester, but in a marshy area close to the Gosbecks spring, a possible lime kiln built of large pieces of building tile and segmental column tile was uncovered in 1948. Nearby, a well-preserved horizontal timber and two vertical posts belonging to a small building were noted (Hull 1958, 270).

Glass

Glass spoilt in the production process was normally remelted and used again. However, evidence for glass sometimes survives in the form of waste fragments called moiles, formed from the waste glass left on the blowing-iron after a newly made vessel has been removed. Moiles have been found at Sheepen (Harden 1970, 51; Allen 1983, 772), Culver Street Site G, where they were dated to c AD 65–150 (*CAR* 6, 118; *CAR* 8, 2265), and in a ditch at Balkearne Lane, loosely dated to somewhere between the 2nd and 4th centuries (*CAR* 6, 118; *CAR* 8, 209, no. 2266). Evidence that blue-green glass was locally produced was apparently recovered from Sheepen area 5 in 1933, but was never published (Harden 1947, 288), although trial trenching close to area 5 in 1969 revealed the remains of a burnt floor with traces of glass on its northern side and a possible stoke hole, perhaps from a glass furnace (Harden 1969, 51; interim report in *Britannia* 1 (1970): 290).

Local manufacture was being supplemented by glass imports from the Mediterranean by the late 1st century if not earlier. In the initial decades of the occupation, glass wares such as the Italian glass bowl from the Stanway ‘warrior’ grave would have been imported from the Mediterranean (Crummy 2001, 66), and from the late 1st century, supply would have also been fed by industries established in northern Britain and imports from the Rhineland,

Belgium and northern France (*CAR* 8, 227).

The extensive Roman glass collection from Colchester is comparable with important European centres such as Cologne and Trier (Jennifer Price, pers comm). In addition to domestic use, glass vessels such as small green-tinged globular jugs, funnel-mouthed cylindrical bottles, barrel jugs and cups were commonly used as grave goods in Colchester into the 4th century (*CAR* 9, 153–4). The relative scarcity of some of these vessels in other north-western provinces may suggest that these were made in Britain (*ibid*). An exceptional glass cup, showing a chariot race in a circus, was recovered from a grave group along the Lexden Road, but the origin of manufacture is not known (Hull 1958, 254). Fragments of other decorated mould-blown cups showing gladiators fighting were recovered from a Claudian deposit at Sheepen (Harden 1947, 229, pl LXXXVI) and from Balcerne Lane (Fig 7.17; Price 1977, 152). Glass decorative jewellery and counters have also been recovered (*CAR* 2, 182).

Other notable glass finds from Roman deposits include 49 turquoise, blue and green *tesserae* from Culver Street (*CAR* 6, 176) and isolated fragments of millefiori glass from Gosbecks and *Insula* 2 (Hull 1958, 79). Painted glass was also popular in the 1st century, with a peak in examples from pre-Boudican deposits, although later examples, such as a piece buried around AD 65, are known (Harden 1947, 297, no. 33; see *J Glass Studies* 43 (2001): 253). The only glassware shop positively identified in Britain is at Colchester (MON709), and may have been destroyed in the Boudican revolt (Wacher 1998a, 223). The small amounts of window glass recovered from Colchester indicates that early window glass here was cast, but by the 4th century it was blown (Perring 2002, 118; *CAR* 6, 117–18).

Metalworking

The small amount of metalworking debris from the intramural area suggests small-scale smithing associated with maintaining domestic, commercial and agricultural equipment. The town house (MON489) at Lion Walk appears to have contained a workshop facing the street dating to the late 1st or early 2nd century. Here a room contained burnt daub, charcoal patches and two furnaces or ovens. Also at Lion Walk, a late 1st-century building (MON473), little more than a hut, contained a forging hearth with fragments of hammerscale (a by-product of ironsmithing), forging slag and furnace lining (*ibid*, 49, fig 38). Small-scale ironworking, dating between the 1st and 3rd centuries, was also indicated at the Gilberd School site by the presence of iron-rich fuel ash slags, smithing slag and a piece of reduced fired clay with a thick vitrified covering. At the same site a possible crucible fragment was recovered from a post-Roman layer (*CAR* 6, 243). A fragment from a pair of large smith's tongs was found unstratified on Culver Street site K (*ibid*, 193), along with considerable quantities of tap slag from smelting dating to the Flavian period or later (*ibid*, 193, 197). Hammerscale was recovered from Culver Street site G, associated either with early 3rd-century buildings (MON599, MON600) or with deposits below them (*ibid*, 197).



Fig 7.17 Part of a cylindrical glass cup decorated with an image of a charioteer with four horses reigned to a halt. It was found at Balcerne Lane, Colchester in 1976 and dates to the period AD 60–80 (COLEM: 1986.67.9999).

At least one coppersmith from the *colonia* is known by name; a plaque found at one of the temples is dedicated to Silvanus by 'Cintusmus the Coppersmith' (Hull 1958, 239; Breeze 2004, 228–9; *RIB* 1, 194). A hearth at the rear of a building (MON589) at Culver Street may have been used for copper-alloy working (*CAR* 6, 31, 78–9) and a furnace associated with bronze working was noted at Lion Walk (MON480) (*CAR* 3, 52). At 21–31 Long Wyre Street, a building (MON1040) contained a number of copper-alloy sheet fragments and a hearth of mid-2nd-century date associated with hammerscale (Brooks 2004c, 29–30). Elsewhere, crucibles used to melt copper alloys have been recovered from Lion Walk (*CAR* 3, 214–15), Balcerne Lane (*ibid*, 215) and Culver Street (*CAR* 6, 194–7; fig 5.1). Further copper-alloy finds and hammerscale came from a later 3rd-century deposit on the Long Wyre Street site, although it was not clear if this was an enclosed or open-air area. At Culver Street, pits close to the cultivated area contained waste products from bronze working and possibly ironsmithing, with the earliest pits dated to *c* AD 60–150. A

rare group of brass-making crucible sherds were also found at Culver Street (*CAR* 6, 194–6, fig 5.2), along with crucibles containing traces of silver; these were of distinctly native form. In addition, a lump of debased silver was recovered from a post-Roman layer (*ibid*, 196–7, table 5.3). At Lion Walk, a crucible fragment contained traces of silver, copper and lead and was evidently used in the manufacture of silver (*CAR* 3, 215).



Fig 7.18 *The Middleborough Mosaic (Colchester Archaeological Trust).*

Outside the town walls an excavation at the Royal Grammar School in 1964 produced evidence of metalworking slag associated with 'burnt floors' and late 1st-century pottery and coins (Crittenden 1967, 3). A watching brief in 2000 re-encountered these floors and, because of the proximity of known burials, they were re-interpreted as cremation pyres (interim report in *Britannia* 32 (2001): 362). The 1930s Sheepen excavation recorded a great deal of bronze slag, crucibles and casting moulds associated with Flavian pottery, indicating that metalworking continued on the site (Hawkes and Hull 1947, 107). An extensive, but undated, area of burnt soil containing a piece of heavy sheet metal and patches of heavy and light slag was noted after ploughing in the 1940s, south of the Gosbecks theatre (interim report in *J Roman Stud* 34 (1944): 81; Hull 1958, 260; *CAR* 11, 104).

Mosaics and stucco work

A large number of mosaics and tessellated pavements have been recorded in Colchester (Neal and Cosh 2009, 83–140). These became common in the 2nd century when the city grew in affluence and after mortar floors had begun to replace earlier daub floors. In the 4th century, however, mosaics were rare in Colchester, in contrast to their popularity in the west of the province (Reece 1999, 82). Details of local production are scant; however, stylistic similarities between Verulamium and Colchester have been noted, as distinct from fashions

in the west of the province (Neal 1981, 19, 70–4; Smith 1984, 362–4; Ling 1997, 264). A possible mosaicist's strip used in the on-site manufacture of mosaic *tesserae* has been recovered. This consisted of a strip of dark stone, possibly limestone, rectangular in section (*CAR* 6, 176). Outstanding mosaics from Colchester include the wrestling cupids from Middleborough (Fig 7.18; *CAR* 3, 168–74; Neal and Cosh 2009, 133–136); the lion and radial mosaics from Lion Walk (*CAR* 3, 57–62; Neal and Cosh 2009, 122–3); the geometric designs from *Insula* 2 (Hull 1958, 78, pl XV and XVI; Neal and Cosh 2009, 87–90); the vase from *Insula* 34 (Hull 1958, 209, pl XXXIII; Neal and Cosh 2009, 113–4); the Buryfield (Berryfield) Mosaic (Hull 1958, 218, pl XXXIV; Neal and Cosh 2009, 126–8); the four-petalled flower from North Hill (Neal 1981, 70–1, pl 38); the dahlia flower from North Hill (ibid, 72–3, pl 40); and the cantharus from North Hill (ibid 71–2, pl 39). Another medium of interior decoration is moulded stucco work, which is rare in the province, but one recorded fragment is part of a relief, perhaps showing a human knee, found in Colchester (Barford 1987, 273).

Bone- and horn-working

Waste products left by bone industries have been recovered from outside the walls; at Balkerne Lane a collection of worked bone and offcuts came from the later levels, while at Butt Road offcuts and waste pieces from a craft workshop making bone ornaments for furniture were dated to the early 4th century (Crummy 1981; *CAR* 2, 152–60). Within the walls a fragment of a cut horn core, perhaps horn-working waste, was recovered from Culver Street among the demolition debris of a late 3rd-century building (MON597); later levels at Culver Street produced more worked antler fragments (*CAR* 6, 197–8). Studies of bone-working both in Britain and on the continent point to this being a craft of the suburbs that was part of an efficient chain of carcass utilisation, providing not just meat and hides but by-products such as glue, pins, spoons, dice and other objects (Crummy 2001b; Bertrand 2008). The quantities of bone-working debris from Colchester are very small compared to the large dumps found at Winchester, and it may be that such dumps remain to be found in unexplored parts of the suburbs, or that the town imported most of its bone objects from elsewhere in Britain (Rees *et al* 2008, 179–94).

Baking and brewing

Dozens of small ovens have been recorded in the town. These were typically set in keyhole-shaped oval pits, sometimes with a piece of flat tile on the oven floor, the superstructure being formed by a dome of daub. Ovens at Balkerne Lane with a long flue and comparatively small chamber at the end may represent a later form (*CAR* 3, 25–6). The lack of vitrified deposits in these ovens suggests that most were for domestic baking; a fine example of a town-house kitchen with multiple ovens was excavated at Lion Walk (ibid, 54).

In addition to pottery wares, evidence for domestic food preparation and consumption from excavated sites includes shale serving trays, copper-alloy and pewter cooking vessels, gridirons, quernstones and stone mortars (*CAR* 2, 69–77). At Long Wyre Street a building (MON1041) contained an oven, cooking bowls and meat-rich bones suggestive of commercial cooking (Brooks 2004c, 30–1). At Culver Street charred grain which appears to have been deliberately germinated as if to make malt for brewing beer was recovered (*CAR* 6, 286); a similar deposit is recorded in *Insula* XIII at Verulamium (Niblett and Thompson 2005, 135).

Imports

Colchester was well located for continental trade, providing the possibility of a direct supply route from the Rhine through to the south-east of Britain. The *oppidum* had already established strong trading links with the continent, and the requirements of the early Roman garrison would have reinforced such links. The range of imported goods found in the *colonia* follows similar patterns to those at other major Roman urban centres. Roman tastes were catered for by the importation of large quantities of transport *amphorae* containing wine, olive oil and fish sauce. Other foods and spices were imported, along with cloth, cosmetics, jewellery, fine art, furniture, metalwork, tableware, glassware and building materials. The last of these was imported from Gaul and Germany as well as Mediterranean quarries which included types of Greek and North African marble (Hull 1955, 24–61; Hull 1958, 188–9; *CAR* 2, nos 2546–821; Drury 1984, 37). Lamps were imported from central Gaul (*CAR* 6, 162) and furniture items include a fine carved Parian marble panther table leg from Culver Street, which originated from the Aegean (ibid, 173–6). Other exotic imports include a variety of pipeclay figurines that can be traced to workshops in Central Gaul and at Cologne (*CAR* 2, 141). There is a considerable assemblage of glassware from Colchester, but unfortunately the origins of this are notoriously difficult to trace. Early supplies would have come from the Mediterranean, with a British industry developing from the late 1st century or early 2nd century and being supplemented by imports from the Rhineland, Belgium and northern France (*CAR* 8, 227).

The study of imports is dominated by pottery because of its durability and the ease of dating. In the early Roman period fine wares are imported, with coarse wares being locally supplied. Over time Colchester developed its own fine ware industry, with supplies also coming from Verulamium. A recession in the mid-3rd century meant the collapse of the import market and, subsequently, provincial industries cornered the remaining market. A full account of the Roman pottery imports into Colchester is not attempted here but can be found in *CAR* 10.

Shops

Apart from the two pre-Boudican shops recorded on the High Street, little is known about the extent and character of commercial areas in the town. It has already been noted that a number of properties at Balcerne Lane, Culver Street and Long Wyre Street encompass workshop and/or shops. The presence of butcher's shops at Balcerne Lane, Lion Walk and Long Wyre Street are suggested by the numerous cattle scapulae from these sites (*CAR* 12; Dobney *et al* 1999, 23). Recent excavations at 21–31 Long Wyre Street have produced an assemblage of meat-rich bones and a structure associated with cooking which may be commercial in character (Wade 2001).

Farming strategies and diet

The scale of the walled town and related public monuments suggests a sizeable population, for which no accurate estimate is possible. Philip Crummy has proposed a population of at least 15,000 for the *territorium* with a core of perhaps 2,000 settlers as a working hypothesis (Crummy 2001, 64). In any case, the population would have constituted a major regional market, supplied by pastoral and cereal farming and market gardening undertaken both within the walls and for a considerable distance beyond. Remains of foodstuffs recovered from excavations provide some indication of tastes and farming strategies.

Meat supply

Butchery waste recovered from the Co-op site in Long Wyre Street provides us with a fair indication of Roman domestic tastes. Here cattle, pig, sheep/goat, horse and dog bones were recorded; the only wild species were roe deer, a small quantity of birds, fish and some small mammals (Wade in Brooks 1997b). At the former Gilbert School and Butt Road sites concentrations of geese, duck and chicken remains were also recorded. Pork, mutton and beef were all popular fare, judging from evidence from intramural sites, with cattle being the dominant species and, in contrast, butchered horse remains being extremely rare (Hawkes and Hull 1947, 350–5; Luff 1985, 149–50; *CAR* 12, 55–100; Dobney *et al* 1999, 22). A faunal study of sites excavated between 1971–85 by Luff has demonstrated that sheep and cattle appear to increase in size during the life of the *colonia*, suggesting better treatment and feeding regimes under the Roman organisation (*CAR* 12, 140). This pattern seems to be common to southern Britain (Grant 2000, 481). Another pattern was the tendency to kill animals young, in contrast to a number of other Romano-British sites, suggesting that the local population was relatively affluent and able to pay for young kills. A similar pattern has been identified at York (O'Connor 1984, 26–7; 1989, 121). Joint disorders in cattle from Colchester indicate that cattle were also important for traction (Dobney *et al* 1999, 22). Given the low incidence of wild animal remains from Colchester sites, hunting does not seem to have been a key means of supplying food, although a wide variety of game birds were caught and eaten, including black-tailed godwit, whimbrel, swan, curlew, tufted duck, mallard, widgeon, lapwing, crane, teal and woodcock (*CAR* 12, 98).

Cereals and other foodstuffs

Carbonised and mineralised seeds from Boudican destruction layers indicate that the dominant local cereal was spelt. A free-threshing wheat and possibly an emmer wheat were also grown along with six-row hulled barley, rye and oats (*CAR* 6, 280–2). Interestingly, a deposit of charred wheat grain from Culver Street had no trace of fungus or insect infestation, which may suggest both effective processing by winnowing and sieving and adequate storage (Alcock 2001, 17). Carbonised and mineralised fruits and nuts from Boudican layers have provided additional dietary information, indicating the consumption of elderberry, raspberry, black mulberry, grapes, figs, cherries, walnut, hazelnut, mulberry, sloe, olives, plum and imported dates (*CAR* 12, 141). The dates are reported to have been found uncompressed, as if imported in a firm container (Alcock 2001, 67). Coriander seeds, commonly used to flavour food, have been recovered, along with dill and poppy seeds from the pottery/food shop excavated on the High Street (*ibid*, 72). A trace of Roman extramural horticulture or market gardening was noted at Balcerne Lane, where loosely spaced ridges were recorded (*CAR* 3, 140).

Marine foods

Mussels and oysters predominated among the shellfish found in Colchester, but whelks, carpet shells and cockles were also eaten. Among the fish, herring, plaice and flounder were most popular, with freshwater salmon and eels being consumed in smaller numbers. Large numbers of oyster shells have been recovered from most Roman sites within the town, and oysters were clearly a popular food. This pattern is not necessarily found at other Essex coastal settlements; at Heybridge, for example, there was no similar evidence for oyster consumption. Excavators have suggested that either Colchester controlled the rights to oysters along this stretch of the Essex Coast or that oysters were exported from Heybridge as a cash crop for urban consumption (Atkinson and Preston 1998, 108).

Intramural horticulture and agriculture

The lack of evidence for widespread fire damage after the Boudican revolt may indicate that the town was not densely built up away from principal street frontages. The intramural area would have contained many gravelled yards, forecourts, gardens, fields and areas of derelict land. Probable garden plots have been identified at Culver Street, the Cups Hotel and Head Street. At the Head Street Post Office site a demi-lune water basin, probably an external garden feature, was excavated (Hull 1958, pl XXXIb; Brooks 2004b, 15–17). The presence of a hypocaust in an adjoining room could indicate that this was part of a bathhouse, but the absence of steps down into the basin makes the former interpretation more likely. Such features are unusual in the province and may indicate that the owner was of Mediterranean extraction.

At Culver Street the southern part of *Insula* 34 was not redeveloped after the Boudican fire; instead the building debris was reworked into cultivation soil, which developed up to 0.55m thick before the land was built over in the 2nd century. At Culver Street cultivation plots or allotments were divided by wooden fences and ditches; spade marks were also recorded and a spade sheath was found (*CAR* 6, 59–61, 186, fig 5.50). The cultivation plots contained small circular pits, some of which contained cattle fodder and faecal remains. Burnt waste from byres or stables recovered from Culver Street also indicate the presence of livestock inside the town (*ibid*, 284).

The land in the south-west quarter of *Insula* 35 appears to have been cultivated from after the revolt through most of the Roman period. Here the Culver Street excavation revealed cultivated deposits that were up to 0.80m thick, similar to those at Lion Walk and Balcerne Lane (*CAR* 3, 56 and 138–41). Instead of a footway, two shallow ditches divided the cultivated land from the former *via principalis*. These ditches appear to be aligned with an arched drain near a large 2nd-century courtyard house to the north, perhaps both formed part of a unified drainage system (*CAR* 6, 61). Curiously, the ditches curved eastwards at the southern end of the *insula*, despite the presence of an arched drain in the town wall just to the south (CAT Report 5/88b). Pits with smithing debris were recorded within the plot, as well as the iron tip of a wooden ploughshare and traces of seaweed manure (*CAR* 6, 186, fig 5.50, 277).

A number of structures recorded at Culver Street may have had agricultural functions. Foundations which almost certainly supported a tower granary (MON572) were found in the cultivated area, most probably dating to the 2nd century, and a probable corn-drying oven (MON573) was built over the foundations in the 4th century (*ibid*, 108–12), although a possible sub-Roman origin for this oven is discussed in the next chapter. A series of utility buildings was located in *Insula* 34: a small post-built structure (MON575), possibly a barn or shed for animals, and a small structure (MON555) associated with a series of ovens of possible agricultural or horticultural use. During the early 3rd century these buildings were replaced with three new utilitarian buildings (MON598–600), all with ovens, one containing a water storage tank and another perhaps a corn-drying oven.

Another building at Culver Street that may have had an agricultural function was a large rectangular building (MON608) built in the late 3rd or early 4th century. The building measured 45m by 17m and consisted of a central room flanked by aisles. Although initially interpreted as a possible church, the plain nature of the structure and its location among allotment plots may suggest an agricultural/storage function (*CAR* 6, 112–16; Faulkner 2000, 129).

Changes in the urban role of the *colonia* in the 3rd century may be suggested by the decline of the pottery industry (Going 1997, 37) and the evidence for farming within the

town (Faulkner 1994, 113–14, fig 9; Perring 2002, 77). Evidence for cultivation in the later Roman period has been recovered from a number of intramural sites. Fourth-century cultivation was noted at Culver Street in the northern part of *Insula* 34 (*CAR* 6, 117), and at the Gilberd School site in *Insula* 9a (ibid, 137). An evaluation at the Hole in the Wall public house in 1994 recorded cultivation soil that had built up over the road to the Balcerne Gate, which had fallen out of use when the gate was closed in the 3rd century (EVT3583).

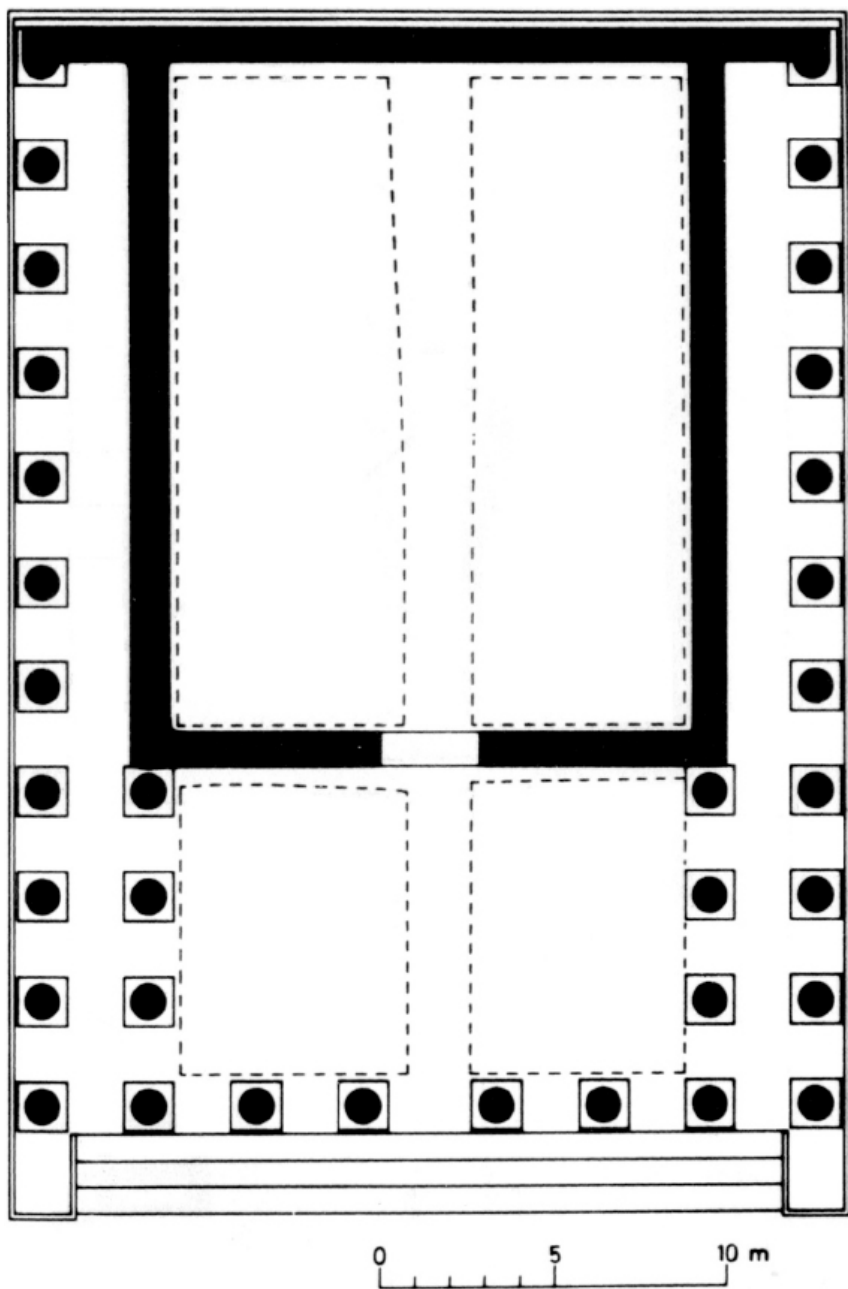


Fig 7.19 Ground plan of Temple of Claudius (P Crummy 1980).

Dark earth

Open spaces in Roman cities as at Colchester, from the late 2nd century onwards, have been

linked with dark earth deposits, sometimes associated with the deliberate demolition of buildings, soil dumping and the reworking of human excrement and midden deposits by the Romans themselves. Excavators in Colchester have tended to distinguish between the darker Roman cultivation soils and the (confusingly) lighter dark earths, composed of household debris, decayed plants and building material, that have sometimes been cultivated in post-Roman times (*CAR* 3, 92). The distinction can be confusing, as soils cultivated in the Roman period have also proved to contain large amounts of building debris (*CAR* 6, 273–5). Uncultivated dumps of dark earth have been noted in the town ditch at Balcerne Lane (*CAR* 3, Sheet 6b, Sx 65) and Lion Walk (ibid, Sx 55, Sheet 6a), suggesting that this was indeed waste material rather than soil brought into town for cultivation. In London it has been suggested that the scarcity of late Roman rubbish pits can be explained by the debris being worked into the dark earth through cultivation (Perring and Brigham 2000, 146).

Post-Roman topsoil or dark earth has been recorded at several locations around the town, its depth influenced by the natural slope. Along the High Street, which follows a natural ridge through the centre of the town, it is virtually non-existent. To the south of the High Street it has been recorded to a depth of 1.4m at Lion Walk, while to the north, at the former Gilbert School, medieval and post-medieval dark earth has been observed to a depth of 1.5m (*CAR* 3, 92; *CAR* 6, 139). In the north-east corner of the town, dark earth layers are recorded as 0.45m thick in *Insula* 15 and beyond the town wall as at least 1m thick (*CAR* 6, 372–3).

Religious and burial practice

The Temple of Claudius

The Temple of Claudius (MON785; Figs 7.2, 7.19), located in *Insula* 22, would have acted as the centre of the imperial cult. At approximately 32m × 23.5m in plan it is the largest Classical temple recorded from the province. The only temple to compare with the Temple of Claudius in size is the Temple of Sulis Minerva in Bath which is approximately 25m × 19m in plan (Cunliffe and Davenport 1985, fig 14). The temple lay within a rectangular walled precinct and may have been served by administrative buildings to the south. Its massive septaria foundations are preserved below the surviving Norman castle (Fig 6.2). The vaults have been mostly cleared of gravel and can be visited, revealing the septaria and tile podium foundations set in poor-quality mortar (Carter 1969). None of the foundation material appears to be reused, perhaps suggesting that the base was built prior to the Boudican revolt, in line with the historical account provided by Tacitus (*Annals*, XIV) of the temple being used as the last refuge for the Roman defenders during the Boudican assault on the town. The exact date of its construction is unresolved; it would have been unusual, although not impossible, for the temple to have been commissioned in the lifetime of Claudius. However, a dedication by his successor Nero is more likely (Fishwick 1972; Irby-Massie 1999, 22–6).

The podium base measures 32m by 23.5m and is 4m high, providing a clear indication of the scale of the original building. Nothing survives of the superstructure of the temple, but by using Vitruvian architectural principles it is possible to suggest that the podium would have supported a massive colonnaded building with an octastyle entrance façade some 20m high, including the exposed part of the podium (Crummy 2001, 60).

Small-scale excavations on the temple were undertaken by Laver in the 1920s and Rudsdale in the 1930s (Hull 1958, 164–8; Drury 1984, 7). Drury reopened one of Laver's trenches in 1977, and further small investigations were undertaken in 1992 for a new lift

shaft, and again in 1996 in the well house (ibid, 9–13; Partridge 1993b, 234–6). Unfortunately these minor excavations have produced little decorative or superstructural material. A note on traces of White ‘Greek’ marble and Purbeck marble from *Insula 22* is provided by Mrs J E Morley (in Hull 1958, 188) and unstratified Caen, Purbeck marble and Purbeck stone is described by Drury (1982, 348). Drury has suggested that the temple was radically altered in the 4th century, when it may have been rebuilt as a large hall or basilica (Drury 1984, 33). He describes evidence of a wall built across the temple steps, which could then have been infilled; furthermore, a tile raft in the sub-crypt was interpreted as part of a later structure built onto the podium. However, the castle well house excavation in 1996 failed to find any evidence for these alterations and the fate of the temple remains unclear. The later reuse of the podium in the 11th century makes it interesting to speculate on the status and symbolism of this site through the 5th–10th centuries: the *Colchester Chronicle* (a 14th-century account of Colchester from AD 219–330 and AD 1071–1239) states that the Norman keep was built on foundations of the palace of King Coel, suggesting a folk memory of activity on the site prior to the Norman Conquest.

The precinct of the Temple of Claudius

The precinct around the temple was, like the temple, orientated north–south, and measured about 150m by 164m (Drury 1984, 21–37; Hull 1958, 189–91). When Castle Park was laid out for public use in 1892, a path was cut through the massive Norman rampart and workmen encountered a substantial Roman wall which Henry Laver traced for some 48m; this proved to be the northern *temenos* wall of the precinct (Laver 1906, 122–5). The foundations of the eastern precinct wall were excavated by the Morant Club in 1921 (Drury 1984, 26) and the north-east corner of the precinct was excavated again in 1950 (Hull 1958, 180–9). The later excavation found that the precinct wall, protected by the Norman bailey bank, survived to a height of 3m above its footings. The wall was of dressed septaria with a rubble core, and a smaller internal wall was recorded 8m to the south.

In 1931–2 the area in front of the castle was examined, revealing a vaulted drain and the corner of a presumed altar base (Drury 1982, 302–419). Subsequently, in 1953, Hull was able to investigate the southern part of the precinct again when a house on the High Street burnt down (Hull 1955, 24–61). Here he uncovered a massive platform built to accommodate a series of solid piers 6 feet (1.8m) wide by 8 feet (2.4m) deep. These supported arches, forming a screen wall for the precinct, which Hull dated to after the Boudican revolt. Fragments of Purbeck marble, white plaster mouldings, arch segments, columns and a variety of building stones were recovered. The excavator ruled out the possibility that the southern end of the precinct was lined with shops or offices and suggested that it was fronted with an ornamental façade. At some point the arches in this façade were closed off with thin walls, creating arched recesses or *exedrae*. Centrally placed in this screen wall was a monumental arch first seen in 1931 and subsequently in 2006 (MON713; Hull 1958, 169–71; Brooks 2006b; Shimmin 2006b). Excavations by Max Hebdictch in 1964 also encountered the southern precinct wall, and he noted traces of timber buildings south of this screen (Hebdictch 1971, 117–20).

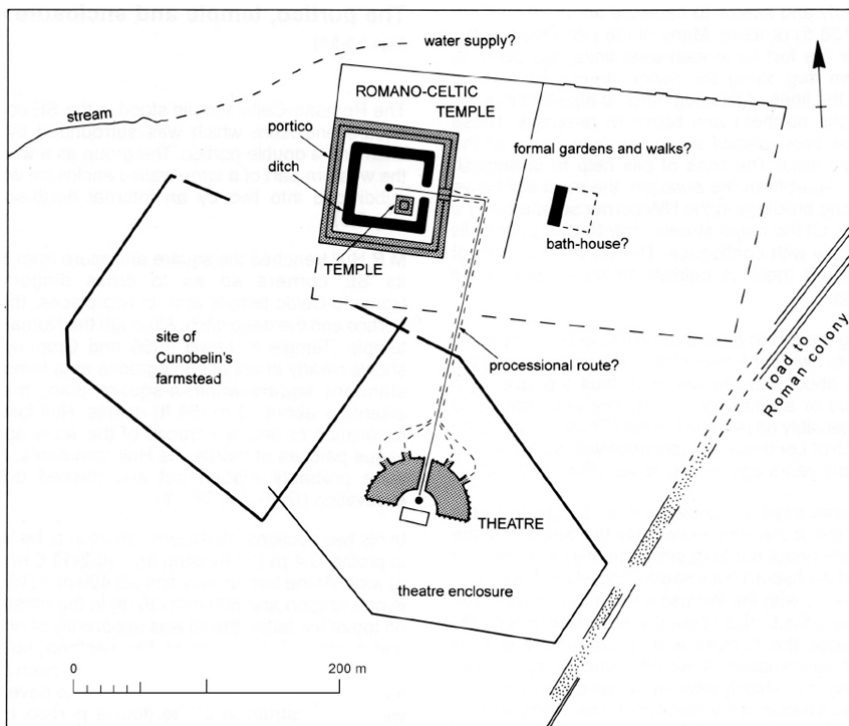


Fig 7.20 Gosbecks in the Roman period (Colchester Archaeological Trust).

In 1964 another excavation to the west of the temple revealed a fine masonry vaulted sewer incorporating fragments of reused marble. A late 2nd- or early 3rd-century pit was filled with building debris, including white stucco from the facing of fluted columns and a sandstone slab from a monumental inscription. To Drury, this suggested a major refurbishment of the precinct in the late 2nd-century (Drury 1984, 28). In 1969 an excavation at the Castle Methodist Church, Ryegate Road, just to the west of the temple, revealed a fine vaulted sewer which was probably part of the late 1st-century layout of the temple precinct (Niblett 1982, 346–7). The inner angle of the southern *temenos* wall was observed again in 1980 at Cowdray Crescent (CAR 6, 940–1).

The character of the *temenos* range is not clearly understood. It was probably an open portico with some enclosed rooms; the north range may have been floored with Purbeck marble slabs (Smith 1847, 29–45; Hull 1958, 189), with the internal walls plastered and painted. The *temenos* itself was probably paved with small bricks, as these and their cement bedding were found in 1964/69 and 1977.

During resurfacing work along Museum Street, to the south-west of the temple, in 1986 a massive north-south foundation was uncovered which measured 2.75m wide and consisted of tile and tile fragments set in *opus signinum* mortar. The foundation was situated directly over the line of the east-west Roman street, which suggests either that at some stage a wall linked the temple precinct with the public buildings to the south, forming a single architectural unit, or that a monumental gateway crossed the street at this point (CAT Report 6/86A).

The speed at which the temple complex was rebuilt after the Boudican revolt remains unclear, although traces of convex column fluting recovered from the precinct could suggest building activity in late Neronian and Flavian periods, when such patterns were popular (Drury 1984, 27). As for the end of the complex, late 4th-century pottery (post *c.* AD 360–70) and coins of Valentinian II (AD 382–92) and Theodosius I (AD 379–95) have been recovered from the precinct. Drury has even suggested that the replastering of the perimeter blocking walls indicates maintenance into the 5th century (*ibid.*, 28).

The Gosbecks temple complex

At some time during the late 1st-century the character of the Gosbecks settlement changed and the fields and settlement areas north of the late Iron Age trapezoidal farmstead enclosure fell out of use. In their place a large religious complex was constructed, with its focus being the large rectangular ditched enclosure next to the farmstead. Excavations, aerial photographs and geophysical surveys have revealed a rich sequence of monuments centred on this site, and it is anticipated that more will come to light (Fig 4.8). During the later 1st century, after the Boudican revolt, a Romano-Celtic temple was constructed in the south-east corner of the rectangular enclosure and a double portico was built around the outside of the ditch. The enclosure evidently contained other features, as suggested by geophysical surveys and the fact that the temple was placed off-centre. The morphological similarity of this enclosure to the burial enclosures at Stanway has been noted (P Crummy, *pers comm*). The Roman portico was itself set within a larger walled enclosure, which abutted another large walled area to the east. The eastern walled enclosure was constructed with recesses or *exedrae* in the northern walls, possibly for benches, and perhaps suggesting that it enclosed a garden. These two walled enclosures, although not fully defined, may have been linked to yet another walled compound to the south which enclosed a large stone-built theatre (*see* page 116 and Figs 4.8 and 7.20), creating an elaborate complex similar to those recorded in northern Gaul (*CAR* 11, 105) and at Lenus-Mars at Trier (Wightman 1970, 211–13).

The late Iron Age enclosure ditch at the centre of the complex has been sectioned twice and was evidently recut and kept clean during the life of the Roman sanctuary. It was V-shaped and measures 7m across and 3.8m deep. Hull's section in 1936 found fine silt at the bottom, along with a little native pottery and a coin of Cunobelin (Hull 1958, 263–4), while a further section in 1997 by the Colchester Archaeological Trust found similar silts at the base, with mid-1st-century pottery and much animal bone, including a number of pigs' heads in the basal fill. Above this material lay roof tile from the collapsed portico mixed with carbonised woodland material, suggesting that the portico had become overgrown before finally collapsing, and above this in turn lay material from the temple (interim report in *Britannia* 29 (1998): 407). The only indication that the enclosure ditch had a corresponding bank was a thin patchy spread of gravel recorded in 1977 between the ditch and the inner wall of the portico (*CAR* 11, 101). No evidence for such a bank was recovered by the 1997 excavation.

The double portico around the enclosure had three parallel walls with an entrance in the middle of the eastern side. The portico foundations were all 1.0m–1.1m wide and were deeper in the north-west corner, presumably because of the steepness of the slope, which descends into a spring hollow here. *Tesserae* recovered from the ditch indicate that the portico may have had tessellated walkways. Excavations in 1996 and 1997 sectioned the corners of the portico to determine its plan, and established that the building's form was not quite square and that it measured roughly 98m across (interim report in *Britannia* 29

(1998): 407).

The temple was of typical Romano-Celtic type with a *cella* and an ambulatory measuring 15m across. From Hull's plans it seems that he must have sectioned it in 1936 without realising it. In 1995 a trench was put across the centre of the well-robbd structure; this produced traces of Purbeck marble dressing, black and white *tesserae* and parts of clay Doric column fragments that had fallen into the nearby enclosure ditch. If these large fragments are from the temple and not the collapsed portico then the temple may have been taller and of more Classical appearance than was previously assumed (Crummy 2001, 106–7). These column fragments were unusually large, suggesting shafts 0.67m in diameter at the base, and had been plastered and painted to give a marbled effect. Vitruvian principles suggest that the columns would have supported a ceiling 5.7m high. An important find from the topsoil above the temple was a finger ring depicting Mars (ibid, 106, inset). The fine bronze statuette of Mercury, found in plough soil at Gosbecks in 1947, was previously considered to be the best evidence for the dedication of the temple, but the ring could indicate that it was in fact Mars who was worshipped here. This would fit in neatly with the idea that Camulos, a native god of war, was originally worshipped at the site, hence the naming of the settlement as Camulodunum. The Roman religious complex may therefore have evolved from a pre-existing sacred place.

The walled *temenos* around the temple and portico was sectioned by Jenkins in 1842 and by the Essex Archaeological Society in 1949. Jenkins records the wall as approximately 3ft (0.9m) thick and noted deep pits close to the wall containing oyster shells, boars' tusks and pottery (*Gentleman's Magazine*, November 1842, pt 2, 526). A note in the *Gentleman's Magazine* records that three sides of the portico were examined, with the exterior wall of the portico measuring 285ft (86.8m) long (*Gentleman's Magazine*, November 1842, 526). The 1949 excavation trenched along the wall line looking for sections that had not been robbed; traces of septaria buttresses and mortared rubble foundations were noted. The septaria foundations of the eastern enclosure were also traced and the remnants of a gravel floor were noted inside the compound (Hull 1958, 264–7). In 1999 CAT attempted to revisit the 1949 trenches, but apart from the relocation of the junction between the two compounds and the ghost of the north–south dividing wall, little new information was produced.

A Roman water main is clearly visible as a cropmark running from near Gosbecks roundabout towards a dark cropmark close to the entrance of the portico. This was examined in 1994, 1995 and 1998, and one section was dated to the 2nd century or later (Benfield 2008a, 6–7; Brooks *et al* 1995; interim report in *Britannia* **30** (1999): 354). The direction of flow was not ascertained, but the presence of a spring near the temple portico suggests that water was being pumped northwards. The 1998 evaluation, north of the temple site, also noted pits and ditches of late Iron Age and early Roman origin. In 1995 CAT excavated a trench across a rectangular parchmark feature east of the temple, revealing slots for large timbers, possibly joists for a timber floor. Another cropmark north of the temple has been suggested as the site of a possible bathhouse or waterworks, while yet another to the east of the temple could be the site of a piscina or the remains of a hypocausted room (*CAR* **11**, 103).

Other Romano-Celtic temples

Eight Romano-Celtic temples have been identified in the vicinity of Colchester, with a further site (MON836) at St Mary's Hospital suggested by a plan and a note by P G Laver. Recent excavations at St Mary's have failed to find any trace of this 'temple' and the sighting now looks suspect (H Brooks, pers comm).

Four temples have been recorded at Sheepen, all of which showed traces of having been built on a slight mound. The first (MON434) was excavated in the 1930s at St Helena School; it was a large structure approximately 18m square which had stone and mortar walls. Stone plinths were built onto the eastern exterior wall of the ambulatory; inside, a number of loose *tesserae* were recovered. A coin of Domitian (AD 81–96) in the floor make-up suggested a date of construction in the late 1st or early 2nd century and three late coins in well-stratified gravel layers east of the temple suggest that the site was in use until at least c AD 333 (Hull 1958, 224–33; Crummy 1980a, 248–52). The temple was surrounded by a *temenos* wall, with alternating buttresses inside and outside the wall. In 1976 a plaque dedicated to Jupiter was found inside the precinct, providing the likely dedication (interim note in *Britannia* 8 (1977): 427; *RIB* 2, Fas 3, 2432.8). A nearby building (MON432), excavated in 1935, may be part of a sanctuary; the structure had two rooms with stone foundations dated no earlier than the late 2nd century (Hull 1958, 224). North of the precinct an L-shaped building (MON671) with several rooms has been recorded as a cropmark, and was perhaps associated with the running of the sanctuary (Crummy 1980a, 256).

A temple (MON431) north-west of the above precinct was partially investigated during the 1930s. It was rectangular, with a gravel path leading to its entrance (Hull 1958, 233–4; Crummy 1980a, 252). Closer to the river Colne two temples were discovered in 1959; here, a stone temple (MON771) had been built on the site of an earlier wooden temple burnt during the revolt (MON770). The later structure had a tessellated floor in the ambulatory and produced traces of marble veneer. A *temenos* wall enclosing these two temples was located; it had a series of recesses, or *exedrae*, probably for benches, suggesting the presence of a garden (ibid, 256).

In 1947 a temple was excavated on the Royal Grammar School playing fields. It sat within a polygonal ditched enclosure with an entrance at the east side; the ditch was c 0.9m deep and was surrounded by an enclosure wall (MON796) which curved around it in a curious manner in order to accommodate its irregular form. Inside this precinct was a rectangular temple (MON795) with a floor of rammed soil. Another building (MON797) to the south was rectangular with a wide entrance, and was perhaps a meeting hall. The curious shape of the enclosure and the care taken to maintain that shape may suggest a previous native shrine on the site. Finds from the site included two stratified coins, one of Domitian (AD 81–96) and one of Hadrian (AD 117–38), as well as a small bronze stag and two bronze plaques, one of which was dedicated to Silvanus by a slave or freedman and the other to Silvanus Callirius by a coppersmith (Hull 1958, 236–40; Crummy 1980a, 258; *RIB* 1, 194 and 195). The stag motif and Silvanus dedications suggest a connection with hunting and woodland (Lewis 1966, 76).

A temple (MON418) was discovered just outside the west gate of the town during excavations at Balcerne Lane in 1973–6. The foundations of the *cella* were noted, along with the robbed-out foundations of the ambulatory. Traces of pink and white wall plaster and part of a mortared stone and tile plinth, possibly the base of an altar, were recovered. The temple had been built on a layer of dumped material that contained late 1st-century pottery. In the 4th century the ambulatory was demolished and its foundations robbed; nothing later than a coin of AD 341 was recovered. The walls of the *cella* survived to the height of the latest Roman levels, suggesting that the building was left as a ruin at the end of the Roman period; this has led to speculation that the *cella* was reused for Christian purposes. Part of a copper-alloy figurine of Mercury was found in the spoil, providing a possible dedication for the temple (*CAR* 3, 123–5). Excavation on the St Mary's Hospital (Balcerne Heights) site

in the vicinity of the temple in the early 2000s produced further evidence for it being a cult centre for the worship of the god and probably also a centre for healing: a second figurine of Mercury, a priestess figurine, model caducei, fragmentary regalia, temple plate, a range of small votive personalia, a collyrium-stamp and a scatter of probes and spoon-probes used in minor operations or to apply salves (Crummy 2006).

Shrines

A small square building (MON419) located on the road from the Balcerne Gate was excavated at Balcerne Lane. It measured 10.8m by 11.2m and may have been a temple of unusual design or perhaps a shrine. The structure had been extensively robbed, although traces of wooden piles survived in the foundation trenches; this is notable because the area is well-drained and the piles could therefore indicate that the building was quite tall. The rear wall of the building was solid but other walls rested on piers, indicating that they may have formed an arcade. The structure lay over the early defensive ditch around the *colonia* and therefore could date from the late 1st century; the date for demolition could be as late as the 5th century (*CAR* 3, 126). Elsewhere, a small rectangular building with a small porch at its western end was excavated in Hollytrees Meadow in 1928–9. The structure measured 22ft by 17ft (6.7m by 5.18m), but unfortunately only the mortar layer of the foundations survived. The excavators suggested that the building was a shrine (MON788; Hull 1958, 114).

The presence of cellars in major Roman towns (10 in Verulamium, 6 in London) has been noted by Perring (1989, 295–8), who suggests a ritual function for some or all of these structures, based on the presence of rich finds and decoration in some of them (see also Niblett and Thompson 2005, 95–6). At least seven probable cellars have been excavated in Colchester, although a ritual function has yet to be definitively demonstrated.

Cult objects and inscriptions

Cult objects in association with temple structures are rare in Colchester. Many cult objects have been recovered, but these could have come from private houses and need not be related to ritual buildings. The most common deities are Jupiter, Minerva, Mars, Silvanus, Venus and the demi-god Hercules (Green, 1976, 216–7; Lindgren 1978, 73–4, 77, 81–2, 93). Three of these deities are known to have received native epithets or were equated with local gods: Mars Medocius, Mercury Andescociuocus and Silvanus Callirius (Hull 1958, 239–40; Breeze 2004, 228–9). Several inscribed copper-alloy votive plaques have been found in the vicinity of temple sites in Colchester (Hull 1958, 239–40) and other common finds are ‘Venus’ figures made of pipeclay, which are believed to have originated in Gaul. Recovered religious figurines include a copper-alloy Abundantia or Fortuna. Animal figurines include an egg, a bull, a pigeon and a ram in pipeclay, an eagle’s wing, a sitting hound, a turtle or tortoise, a snake’s head and a cockerel in copper alloy and a jet hare, (*CAR* 2, 141–5). A number of jet bears from infant burials in the town relate to others from Yorkshire and Germany, pointing to a folk belief in the protective power of a bear-mother goddess who was probably derived from Artemis (Crummy 2010). Other notable finds include a high-quality bronze statue of Mercury and an iron finger ring with an image of Mars engraved on a semi-precious gemstone, both recovered from near the Gosbecks Temple site; a bronze statuette of Jupiter (FND141) found west of Queens Road in 1844 (Hull 1958, 275); a possible altar stone found at Middleborough (*CAR* 3, 165–6); an intaglio ring depicting Hercules as a god (Henig 1978, no. 429; Irby-Massie 1999, 129); a fragmentary stone sculpture of an equestrian figure which may represent the Indo-European/Celtic horse

goddess Epona (Huskinson 1994, 1.8.14; Irby-Massie 1999, 154); a copper-alloy figurine of the child-god Harpocrates, evidence of the cult of Isis, from Oxford Road (Crummy 2008, 21); and a wheel-thrown pot showing a set of tools used by a blacksmith which was found as part of a grave group at Colchester and may have served a ritual purpose in the cult of Vulcan (May 1930, 146–7 and fig 3; Toynbee 1962, 192).

Inscriptions from Colchester include a dedication to Mars Medocius from St John's Abbey (*RIB* 191), perhaps belonging to a shrine beyond the town walls and similar to the extramural shrine to Mars noted at Gloucester (Wacher 1995, 160). The dedication to Mars Medocius is otherwise unknown and could be a local cult (Clarke and Davies 1979, 35). A large altar or statue base made of sandstone was found just outside the town wall in Balcerne Lane in 1881; the dedication is to Matres Suleviae and it may have come from a nearby temple (Hull 1958, 113, note 1; *RIB* 192). Another find of note was an altar of Purbeck marble recovered in 1764 on the edge of the western cemetery; its dedication is to Numina Augustorum and Mercury Andescociuoucus (*RIB* 193).

Cemeteries

Colonia Vitricensis was a large and cosmopolitan urban centre and the surrounding cemeteries encompass a wide variety of burial styles that would have been influenced by diverse factors such as family custom, social status, gender, age, ethnic group, religion and occupation. In contrast to more conservative rural traditions, urban culture was more tolerant of variations in personal religion and burial preference, allowing a fusion of native, Mediterranean and continental traditions and creating a huge diversity of burial forms.

Under Roman law, burials were excluded from the walled area with the exception of very young infants, who were commonly buried in and around private houses in the town, although they also appear in the later phase of the Butt Road cemetery. There are no recorded examples of early burials from close to the town wall and it is possible that an area was marked out where human occupation took precedence. Such a zone would be akin to the Classical concept of the *pomerium*. This was, in theory, a space clear of buildings around a city boundary. At Gloucester there is evidence for a large distinct suburban zone free from burials (Hurst 1999, 120–1, fig 5), and at Colchester burials appear to be spaced in an irregular way around the walls, gradually getting closer as the suburbs decline in the 3rd century. In 1986 a cremation dated to the late 2nd–early 3rd century was recovered from 12 St John's Street, only 15m from the line of the city ditch (CAT 7/86A). It is possible that there was no formal limit to the suburban area and that burials were simply kept away from housing.

Extensive cemeteries stretched north, west and south of the Roman town, beginning along roads and tracks but over time expanding into the field plots beyond, encompassing former agricultural land and linking with existing native burial areas. The full extent of the burial zones and the nature of their internal division remain largely unknown. A number of general cemetery areas have been identified and broadly defined in relation to the Roman road network, but these are simplified divisions (Hull 1958, 250–2; *CAR* 9, fig 8.2). Colchester has produced a large corpus of Roman grave goods, but many of these were recovered as stray finds during the 19th century when collectors were interested in objects rather than context or stratigraphy. The early focus on collecting grave goods resulted in cremations receiving greater attention than later unaccompanied inhumations and the known distribution pattern also reflects other accidental factors, such as the westward trajectory of Victorian ribbon development, the laying-out of garrison land in the 19th century and the position of Victorian gravel and brick pits. Luckily the scale of the burial

zones is such that many burials remain and excavations are slowly building up a more detailed picture of burial practice, distribution and management.

Museum curator Rex Hull catalogued 627 burials in his unfinished and unpublished index of grave groups, which covers groups collected from excavations and as stray finds up until about 1960. Within this catalogue are important assemblages collected by George Joslin from around his house in Beverley Road and by John Taylor from his house at West Lodge. These and many other groups were found in the vicinity of the main Roman Colchester–London road (Fig 7.22; *CAR* 9, fig 8.2). Just outside the west wall of the *colonia*, burials were recovered from the Union Workhouse (also known as St Mary's Hospital and now Balcerne Heights). Sixty-four inhumation burials and one cremation burial were excavated here during investigations on the site in the early 2000s (S Benfield pers comm). Other major recovery sites included the gravel pit at Butt Road, worked in the mid-19th century, which cut into a large inhumation cemetery. Further south the construction of the artillery barracks encountered cremations 'like currents in a fruit cake'. North of the walls a brick pit near the north-east angle of the town wall and a railway cutting north of the river Colne disturbed still more.

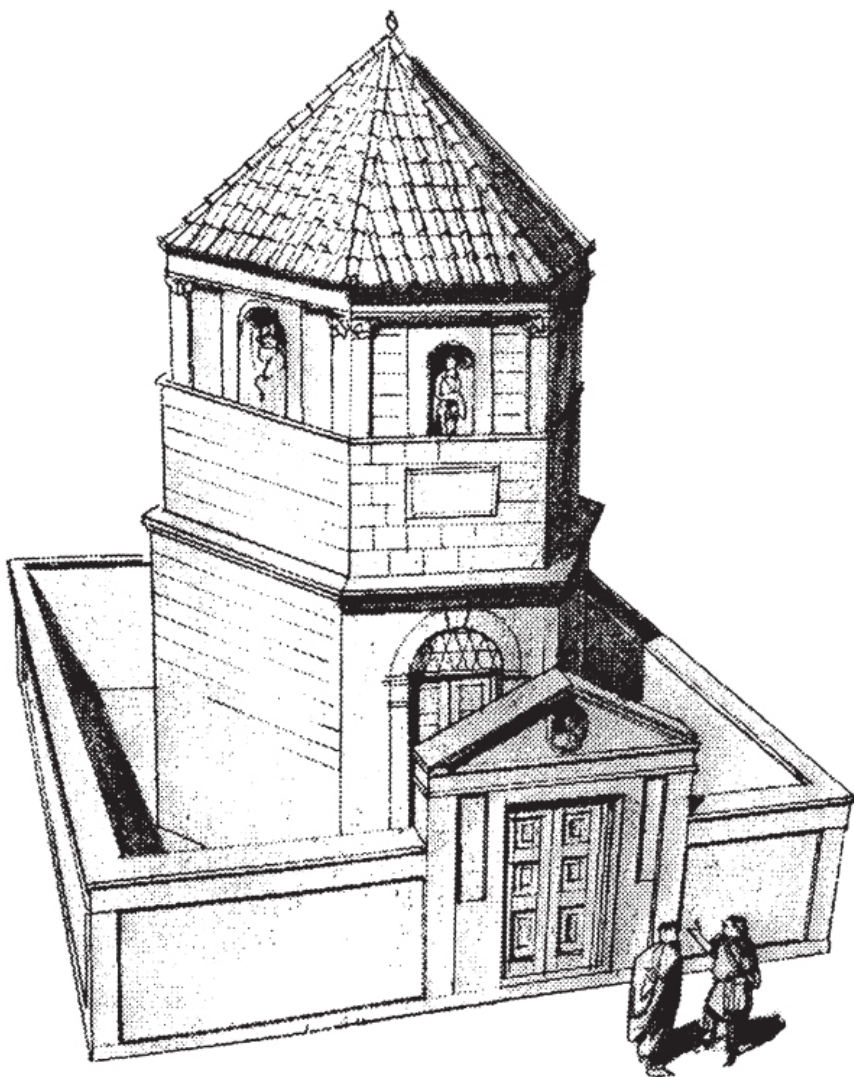


Fig 7.21 Reconstruction drawing of the 'temple-tomb' found at the Royal Grammar School in 2005 (© Peter Froste. All rights reserved, DACS 2013).

Several excavations have encountered significant numbers of burials (Fig 7.22): Sheepen (1930s), the walled cemetery at the Royal Grammar School (1934–9), Sheepen (1970), Maldon Road (1971), St John's Abbey (1972), Butt Road where nearly 750 burials were recorded (1976–9 and 1988; Fig 7.25), Turner Rise (1996–7), the Garrison Sports Ground, Abbey Field (2000; Fig 7.23), St Mary's Hospital (1997–2003), Handford House (2003; Fig 7.24) and the Garrison (2004–5; Fig 7.23). In addition, around 30 cremation and inhumation burials have been recovered over the last 20 years during the course of small-scale evaluations and excavations. Aside from the large suburban burial areas, smaller burial sites have been recorded near outlying settlements: for example, at Gosbecks (Hull 1958,

259; interim reports in *J Roman Stud* **34** (1944): 81; *Britannia* **28** (1997): 432; *Essex Archaeol Hist* **28** (1997): 217) and Kirkee McMunn barracks (Shimmin 1998b, 266).

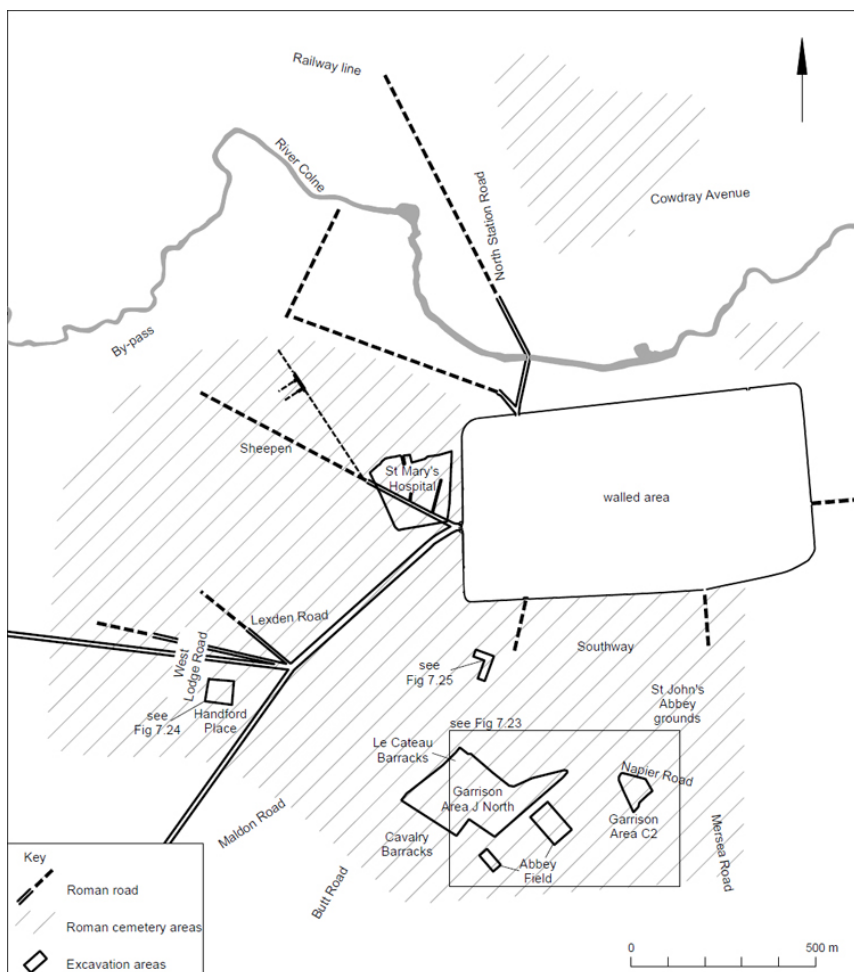


Fig 7.22 Location map of Roman cemeteries.

The western cemeteries

Large numbers of burials have been recovered as stray finds from west of the town, grouped by Hull into the 'Lexden Cemetery', 'West Cemetery' and 'Union Cemetery' (Hull 1958, 252–5) and by Philip Crummy into 'Lexden Cemetery' and Area A, Area B, Area C, Area I and Area N (*CAR* **9**, 259–64, fig 8.2). Important early stray finds included military tombstones from the area around the Roman road junction near the Royal Grammar School, suggesting that a 'street of tombs' developed here as a military cemetery for the fortress garrison (Crummy 2001, 108; see Chapters 5 and 6). The recovery of four civilian tombstones from the same area (*RIB* **202**, 204, 206, 208) indicates that the military cemetery evolved into a civilian one when the *colonia* was founded. Other funerary carvings

from the area include the Colchester Sphinx (FND241), found in the garden of the Essex County Hospital in 1821 (Hay 1821, *RIB* 211), and the veiled and diademed bust of a woman (Hull 1958, 254). In addition to high-quality tombstones, the approach road also attracted larger funerary monuments, of which the most important found to date was discovered in 2005 at the Royal Grammar School (MON1054; Fig 7.21; Brooks 2006c). This is a **temple-tomb** built in the mid-3rd century, which in plan was a hollow, slightly uneven hexagon with a maximum width of 5.2m set within a square which measured 9.2m externally. It had an irregular circular central space with a diameter of 3.0m to 3.2m. The temple-tomb survived at foundation level only with the exception of the north wall, where a course of septaria in mortar capped by a single course of dressed and externally chamfered tufa blocks gave some impression of the nature of the superstructure. The foundations were of an unusual build, with alternating layers of loose sandy gravel and mortared small stones. The hexagon foundation was broad enough to support a substantial superstructure such as a tower (ibid, 4–5, Fig 7.21). There were six cremation burials associated with the temple-tomb, two inside the hexagon and four between the hexagon and the outer wall, none of which had intact cremation urns (ibid, 5). One of these, that of a young adult, contained the bones of a sparrowhawk and other juvenile birds, which could suggest that the human remains are those of a falconer whose birds were cremated with him, although an alternative explanation is that they are merely part of a more general ritual (ibid, 20, 26). There is one almost exact parallel for the Colchester temple-tomb – the temple at Mordelles in Brittany. Here, the interior hexagon is much more slightly built and may not have supported the type of tower which is assumed to have existed at the Grammar School site. Though there are no parallels for the hexagon-in-a-square in Britain, there is a much larger hexagonal temple (9m in external diameter) at Collyweston (Northamptonshire). Neither of these examples has associated burials, however, so the comparison is based upon the hexagonal plan, rather than a function as a tomb (ibid, 25).

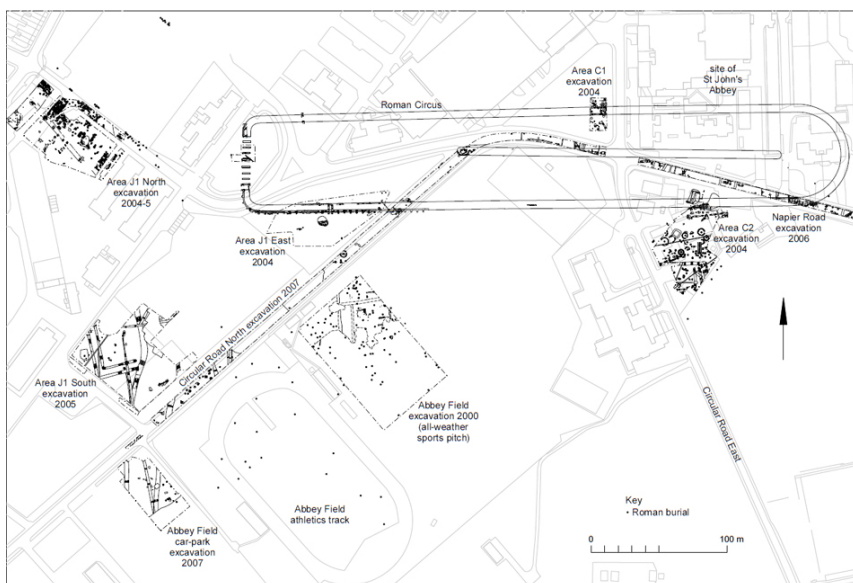


Fig 7.23 Plan of Roman burials excavated at Abbey Field, Napier Road and Garrison Areas J1 North and C2 (insert to Fig 7.22) (Colchester Archaeological Trust).



Fig 7.24 Plan of Roman burials excavated at Handford House (insert to Fig 7.22) (Colchester Archaeological Trust).



Fig 7.25 Plan of Roman burials excavated at Butt Road (insert to Fig 7.22) (Colchester Archaeological Trust).

In addition, fragmentary traces of larger funerary monuments have also survived. One of the tombstone inscriptions reads '*in hoc tumulo*', suggesting that it was related to a burial mound or tumulus (*RIB* 1, 204). Such mounds survive at Lexden Mount, to the west (Laver and Reader 1913), and at Mersea Island, 18km to the south (VCH 1963, *Essex* III, 159–61, pl IVa). Elsewhere at Colchester, traces of large stone funerary monuments have been recorded at the Royal Grammar School (Hall 1944, 68–90; MON1054, Brooks 2006c),

Beverley Road (interim reports in *Britannia* **29** (1998): 407, and *Britannia* **30** (1999): 354) and West Lodge (Hull 1958, 250).

Cremations dating from the 1st to 2nd centuries have been recovered some distance east and west of the Roman road junction at the Grammar School and some are clearly set back well away from the known roads. For example, one later 1st-century burial (ELM1242; Crossan 2000d) was found 115m south of the main London road, close to another early burial (ELM533). It seems that early burials were not simply confined to a strip alongside the main roads and that cemetery plots must have been laid out, sometimes set well back from the roadways, at an early stage. Some of these may have been associated with cultivated fields, a pattern that occurs later at Butt Road (*CAR* **9**, 26), or perhaps in plots near settlements and trackways located in these areas. There seems to have been little obvious planning or regulation, as by the end of the 1st century burials were spread over a wide area north, west and south of the city. The gravegoods from these burials and the lack of tombstones suggest that these areas away from the main road were less prestigious areas to be buried than next to the road.

One such burial area, Handford House in Lexden, was excavated in 2003 (Fig 7.24), and was the first modern sizeable excavation in the important western cemetery area. Two pyre sites, 57 cremation burials and 9 inhumation burials were revealed at the site (Orr and Crummy 2004, 3; Orr 2010). A wide variety of cremations was recovered, most of which dated to the 1st or 2nd century AD, although some belonged to the later Roman period. Some cremations were definitely pre-Boudican in date. Single urns were the most numerous, while a range of more elaborate grave groups featured additional vessels such as bowls, flagons and small beakers. In two groups, large fragments of pots had been arranged in the grave pit to shield small lamps from the grave backfill, suggesting that they may have been lit to provide light for the deceased person. The most exciting features were the remains of two *busta* cremation burials, in which the cremated remains were left in a slot below a pyre; these are comparatively rare in Britain and have been generally associated with the army. The evidence from the finds and the methods of cremation suggests that, in its earliest phases, the burial ground was closely associated with the inhabitants of the Roman colony rather than the Romano-British (native) population. The eight inhumation burials were buried at a deeper level than most of the cremations, and at various orientations; some were evidently placed within coffins, while others were not.

A watching brief in 2004 at an adjacent site, 21 West Lodge Road, revealed one *in situ* cremation burial and three disturbed cremation burials. The *in situ* burial urn contained three coins and a hand-mirror, and these, together with the cremated bone, suggest that this was the burial of an adolescent girl or young woman who died after c AD 77–85 (ELM1410–13; Orr 2010, 2–3). Lastly, further cemetery evidence was revealed during two phases of fieldwork at 15 West Lodge Road: in September 2004, two evaluation trenches were excavated, uncovering two intact urned cremation burials and uncremated, probably human, bone in two pits which may represent inhumation burials. A watching brief and limited excavation subsequently carried out from December 2004 to September 2005 produced a further four or five cremation burials plus a burnt feature (perhaps a *bustum*). Burial occurred on this site from the 1st or early 2nd century to the late 3rd or 4th century (GRP132; Orr 2006, 3–6).

At Sheepen in the 1930s eighteen cremation burials were recovered, including six inserted into an abandoned tile clamp at various dates in the 2nd and 3rd centuries (Fig 4.9; Hawkes and Hull 1947, 116; Hull 1963, 144–7). This appears to be a discrete group perhaps belonging to a group of potters working in the Sheepen area. Between 1934 and

1939 A F Hall excavated a compact walled Roman cemetery (MON792) in the grounds of the Royal Grammar School, 3m north of, and parallel to, the Roman Colchester–London road (MON794). The cemetery contained 10 cremations and 5 inhumations spanning the 1st to the early 4th centuries, all located within a robbed-out walled enclosure 11.5m by 8.1m. The enclosure could be a family burial ground similar to that at Langley in Kent (Jessup 1959, 14–15, 26–7; Toynbee 1971, 94) or, alternatively, it may have belonged to a burial club or religious grouping. Building fragments and traces of foundations recovered from this site suggested an ornamental coping or roof that protected a bay facing the road, which perhaps housed a monumental tomb. Elsewhere in the small cemetery other freestanding features were suggested by small sockets and plinth foundations, and a pit containing whelk and oyster shells was noted. The pottery recovered from the site indicated activity from the late 1st or early 2nd century through to the 4th century. The cemetery may have been filled to capacity, as another skeleton was found just outside the walls (Hall 1944, 68–90).

Fourteen late 3rd- to 4th-century inhumations were recovered during excavations at Sheepen in 1970. These were scattered over an area 50m square and had no clear alignment (MON688). A further five pre-Flavian burials were recorded on a different part of the site (Niblett 1985, 22). An excavation at Maldon Road produced 18 inhumations dating to the 3rd or 4th century (*CAR* 9, 236–44). Here the cemetery (MON379) lay over a 1st-century building (MON380) and appears to have been orientated on the road from the Balcerne Gate. The layout was undisciplined, but three distinct phases were identified, the earliest orientated to the north-west and the latest roughly east-west and therefore conceivably Christian; only four of the recorded burials were accompanied by grave goods.

Trial trenching, excavation and watching brief carried out during 1997–2003 at St Mary's Hospital recovered 64 well-spaced inhumation burials including one crouched burial, plus one cremation burial (S Benfield pers comm; CAT Report in prep). Most dated from the 3rd century onwards; the bodies were placed in wooden coffins and buried in a variety of orientations. Many had footwear that survived as hobnails, while others were accompanied by grave goods. Some parts of this cemetery were probably terraced away in the 19th and 20th centuries (Brooks 2002a, 12–13; interim report in *Britannia* 33 (2002): 325).

The southern cemeteries

Large numbers of burials have also been recovered as stray finds from south of the walls stretching out to the Cavalry Barracks site, Hull's Abbey Field and Butt Road cemeteries (Hull 1958, 254–6) and Crummy's Area D, Area F, Area G, Area L and Area H (*CAR* 9, fig 8.2).

In 1972 34 inhumations (MON374) of late 3rd- to 4th-century date were recovered during excavations in the grounds of St John's Abbey (ibid, 205–13). Most graves contained iron nails and traces of decayed wood, indicating the use of coffins, but grave goods were almost entirely confined to child burials. The cemetery was in existence in the decade *c* AD 270–80 (dated from a rich child burial), but it was impossible to establish upper and lower limits for its period of use. The high incidence of graves aligned east-west suggests that some of these graves were later than *c* AD 320, in line with the pattern observed at the Butt Road site to the west.

Excavations preceding the construction of the police station at Butt Road in 1976–9 and 1988 produced over 700 inhumations and at least five cremations (*CAR* 9, 4–5). These represented the north-eastern edge of an extensive pagan and, in its later phases, a Christian

cemetery containing upwards of perhaps 2,000 burials, many of which had been quarried away in the Butt Road sand and gravel pit. Two further inhumations were recorded in 1997 behind 47 Butt Road, one of which was definitely east–west in orientation (Benfield 1997b). William Wire recorded numerous burials from the nearby sandpit in the 1830s and 1840s; perhaps as many as 200 cremations and inhumations were exposed during this time (Wire nd).

The area was initially divided up by boundary ditches into loosely defined plots probably used for agriculture. Scatters of ironworking debris and pottery point to industrial activity nearby. The earliest cemetery phase, with a closing dated of *c* AD 270/–300/20 (MON396) produced 15 uncoffined inhumations aligned more or less north–south, and five cremations which were probably directly associated with those agricultural plots as the burials lay close to the boundary ditches and were aligned with them (*CAR* 9, 13, 28). In the early 4th century a more formal cemetery was laid out, with boundaries that still conformed to the earlier plots (*CAR* 9, 28). This phase produced 44 mainly coffined north–south aligned inhumations, including a plaster burial. Five family groups were distinguished, based on location and supported by non-metrical variants of the skull and burial characteristics (*CAR* 9, 34, 51–4). A small number of inhumations in this phase were without coffins; these may be people who had been socially excluded or punished. Some bodies were placed awkwardly, as if little care was taken, while others were found in a flexed or prone position, including three bodies placed in one pit. The phase was short-lived, commencing *c* AD 300/20 and ending *c* AD 320/40 (*CAR* 9, 55), with 59 burials aligned north–south. Of these, 15 inhumations and 5 cremations were dated to the *c* 3rd(?) century AD–AD 270/300/20 and 44 inhumations were dated to *c* AD 270–300/20 to 320/40.

Decapitated burials are known from inside town and from Cedars Road, located east of the Butt Road cemetery. Four bodies were found here in 1930: one was lying in a crouched position with the decapitated skull placed near the pelvis (GG271), while another had been deliberately dismembered (GG273a).

The final phase of the Butt Road cemetery is marked by a shift to using east–west oriented inhumation (MON397). This probably occurred *c* AD 320.40 (arguably AD 330 from the coin evidence) and coincided with the construction of a cemetery church (*CAR* 9, 159–62). These later burials were tightly packed and carefully managed in rows in order to respect one another, but not the earlier north–south burials. Although there is some evidence that new burials respected earlier ones, there was still some intercutting. The cemetery at this stage probably extended further to the south, east and west of the excavation limits. There is evidence for some continuity of the earlier family burial plots, and new family groups can also be distinguished, again supported by evidence from the human bone and from the burial. Only a few of the graves contained grave goods and dating evidence was scarce but could be supplemented by short stratigraphic sequences of intercutting graves. Despite the low number of grave goods, the site provides valuable evidence for dating 4th-century finds, matching Lankhills and other cemeteries in Winchester (Clarke 1979; *CAR* 2; *CAR* 10; *CAR* 8; Swift 2000; Rees *et al.* 2008; Crummy 2010). Those with grave goods were mostly children and, of these, mainly young girls, leading to a suggestion that buried jewellery had functioned as a dowry for the bearer (*CAR* 9, 130). Some skulls had hairpins close by, indicating that the occupant had been dressed for burial. There were also traces of shrouds, one incorporating silk of possible Chinese origin. Hobnails were almost entirely absent from the later cemetery. The presence of nails with the majority of the later burials suggests that they were placed in wooden coffins, and there was also evidence for a variety of structures designed to enclose burials. For example, a baby

burial had been laid out face up on a *tegula* placed flanges upwards with a second, reversed, *tegula* laid on top. The cemetery also included six timber burial vaults and a number of tree-trunk, log or plank burials. A few graves seem to have been marked on the surface by rubble or timber posts. No stone coffins were recovered from Butt Road.

In 2000 an excavation and watching brief on the site of the Garrison Sports Ground at Abbey Field revisited a cremation cemetery previously encountered in 1925, when 28 burials were noted. Seventy-three cremations dating from the 2nd–4th centuries were recorded; they were mostly unaccompanied burials placed within urns of everyday pottery. Some graves, however, contained additional pots and personal items such as shale and copper-alloy armlets, jet beads, coins, a green glass unguent bottle and a small stone mixing palette, possibly for cosmetics. Four of the cremations were within wooden boxes and one lay within a tile cist (Crossan 2001a, 5–7; interim report in *Britannia* 32 (2001): 361; Denison 2001, 7). Most of the graves lay either side of a parallel pair of indistinct linear features possibly representing a trackway. An undated but potentially early ‘intensely’ burnt area was also noted.

More recently there has been further work to the north and east of Abbey Field which has revealed a considerable number of burials and various burial rituals. In Area C2 of the Garrison redevelopment area, to the south of Flagstaff House, a total of 67 Roman burials and burial-related features were recorded in 2004 (Pooley *et al* 2006, 31–3). These features consisted of 26 inhumation burials (including a lead coffin), 24 cremation burials, 11 urned cremation burials, 5 burial pits containing pyre debris, and a single boxed cremation burial. The inhumations dated from the early–mid 2nd century to the mid–late 3rd century and were succeeded by the cremations, which ran into the 4th century. The burials appeared to be divided into two distinct concentrations, which would indicate the presence of two burial plots. The majority were found in Burial Plot 1, which was notable for the presence of 10 barrow burials. The barrow burial is a highly unusual burial practice in an urban context and has been interpreted here as evidence of a detachment of regular troops of Germanic origin drafted in to protect Colchester from Saxon raiders (*ibid*, 67–70). Burial Plot 2 contained the remains of a mausoleum, a rectangular stone walled structure measuring 10m by 7m, associated with an inhumation burial within a lead coffin. This is another unusual, high-status burial rite in Colchester (*ibid*, 70–1). Excavations in Area J1 North of the Garrison redevelopment area, to the south of Le Cateau Barracks, took place during the winter of 2004–5. These revealed 356 burials and related features (*ibid*, 39–40), comprising 207 inhumation burials, 70 urned cremation burials, 20 un-urned cremation burials, 37 burial pits containing pyre debris, 13 pyres/*busta*, 5 pot scatters (possibly from disturbed burials) and 4 pyre-related features. Unlike in Area C2, no distinct burial plots were identified, there was no distinct date range for the use of the inhumation or cremation burial rite and burials had ceased by the middle of the 3rd century. In general, burials within this cemetery appeared to be of varying status, with many completely empty of grave goods while others contained many pottery vessels and small finds such as coins and jewellery (*ibid*, 71–2). Lastly, in Area J1 South a group of four urned cremations burials, two *amphora* cremation burials and one inhumation burial are thought to represent a family burial plot within a small field of the family’s holding (*ibid*, 42, 72–3).

The northern cemeteries

A sizeable cremation cemetery north of the river Colne is suggested by a series of cremations identified by William Wire in a railway cutting and brickyard east of the station, Hull’s North Cemetery (Hull 1958, 257) and Crummy’s Area M and Area K (*CAR* 9, 261).

Over 32 cremations of late 1st-century to late 3rd-century date were recorded; this cemetery may have served the suburb located in the vicinity of the Victoria Inn in North Station Road. Another cluster of eight or more burials was recovered during the excavation of a brick-earth quarry south of the river just outside Duncan's Gate, in Hull's North-east Cemetery and Crummy Area J. Here both cremations and inhumations were noted, one of the latter being in a lead coffin (Hull 1958, 257–8; *CAR* 9, 262).

In 1996 and 1997 the work preceding the construction of the Asda superstore at Turner Rise recovered 60 cremation burials of late 1st- to 2nd-century date. Just under half were in pots, while grave goods included wooden baskets and up to five pottery vessels in individual grave groups. The cremations were strung out in a loose north–south line of informal clusters (Shimmin 1998a, 13; interim reports in *Britannia* 28 (1997): 434; *Britannia* 29 (1998): 408; and *Britannia* 32 (2001): 36).

Cremations

An average cremation burial from Colchester consists of one vessel containing the cremated bone and one other vessel; however, there are many variations. Cremations were generally placed in ceramic urns, but glass or lead vessels were also used. Often cinerary urns were covered or sealed in some way by a pottery lid or tile fragment. In one instance a glass urn was sealed with a lead lid (GG181). Four lead urns have been recovered: three from St Mary's Hospital (*CAR* 9, 267–8) and one in Beverley Road containing the remains of the centurion *Facilis* (GG39). Such lead containers are seen as a distinctly Roman cultural form associated with urban centres.

A variety of pottery forms were used as urns; one distinct type from Colchester is a rounded pottery jar decorated with human faces, which were added to the body of the pot by layering or incising the clay. Colchester has produced an important collection of face pots and may have been the origin of the tradition within the province (Braithwaite 1984, 105). The Colchester face pots have characteristically short necks and high shoulders similar to or perhaps derivative of Rhineland forms (Ritterling 1913, pl xxvii: 12; Austen 1991, 174). The face pots occur both on domestic sites and in burials, and the faces encompass a wide range of facial expressions, although they are typically tight-lipped or round-mouthed as if blowing (May 1930, pl L1a and LII). They may have been votive objects associated with the rural deity Pan (ibid, 143–4) or perhaps, less mysteriously, they were children's items (*CAR* 9, 275): for example, a face pot was recovered from a child's grave excavated at St Mary's Hospital (Brooks 2002a, 14).

The presence of food or liquid containers in many of the graves need not automatically suggest that food and drink were left with the dead. Only three graves have revealed actual traces of animal remains: parts of a chicken (*CAR* 9, 205), a pig (Joslin Collection, Grave 19) and eggs (Alcock 2001, 46). The use of food and drink containers in graves could, rather, indicate the burial of favoured possessions (*CAR* 9, 270). One grave at Butt Road contained food-related objects that were already 200 years old when they were buried, suggesting that they were perhaps heirlooms or favourite objects, or items that had prestige value because of their rarity (ibid, 23–4, 47–8; Going and Belton 1999, 156). Another Colchester grave found in Creffield Road contained traces of an imbibing pipe (Laver 1889b, 273–6): parallels from other provincial centres include examples at Chichester (Down and Rule 1971, 72) and Caerleon (Wheeler 1929, 1–7).

At St Albans early Roman cremations were often placed within square or rectangular ditched enclosures, suggesting family groups or *collegia* (Niblett 2001, 120). At Butt Road, Colchester, probable family groups were identified based on age difference, orientation and

consistency of grave goods (*CAR* 9, 92–3, 156–8). However, the earlier cremations from Butt Road were not located in well-defined ditched plots or enclosures and elsewhere in Colchester the recovery pattern of burial groups has been too fragmentary to trace evidence for bounded groups.

It is rare to find cremation burials loose in the soil, although some have been recorded at the Asda site (P Crummy, pers comm) and caution is required, as such burials are generally harder to identify during excavation. Based on the existing excavated evidence human remains were generally enclosed in a container and in a number of instances the container was itself enclosed in a cist or chamber. At least 18 examples of burial cists are recorded, usually incorporating roof *tegulae* formed into a box shape. An exceptional example was found in Beverley Road, comprising a square chamber made from 40 coursed tiles (GG455). Complete or near-complete *amphorae* were also used as ready-made cists. Up to 1990 over 19 graves have been found in association with *amphorae* (*CAR* 9, 265). *Amphorae* were reported from the late Iron Age cemetery at Lexden in the 19th century and presumably held cremation burials (Hull 1958, 252). This type of burial was seemingly a native tradition derived from the continent. Some post-Conquest *amphora* burials have been identified as utilising Dressel 20 forms datable to the 1st–3rd centuries. Such burials appear to be high status, a prime example being the ‘Lockhart’ burial found at Sheepen. Here the grave contained a flagon and *amphora*; the latter contained a wooden box or casket, nine pottery vessels (one of which contained the cremated bone), two glass vessels, a lamp, two brooches, a mirror, a knife, a bone needle, a bone pin, 20 beads and other small objects (GG302; Hull 1963, 144–6; CMR, 1935, 18–26; *CAR* 9, 265).

Evidence for at least 12 wooden caskets, some of which are likely to be ladies’ ‘vanity boxes’, has been recovered. Others have studs bearing a lion’s head motif and appear to have been specially made as funerary furniture. The lion’s head is thought to represent the ‘jaws of death’ and is a symbol not found in late Iron Age art (Borrill 1981, 315–16). Whether this suggests a Roman occupant or simply a Roman influence is unclear. One of the earliest graves with lion’s head mounts is from west Colchester and contained Gaulish rosette brooches that also appear in late Iron Age contexts at St Albans (May 1930, 255; Philpott 1991, 15). Despite this evidently pre-Roman influence it has been pointed out that lion’s-head mount graves often include other objects with a distinctly Roman cultural influence: examples include a phallic amulet in the Joslin Grave 81b/94 (May 1930, 276). Perhaps distinct from casket burial were plainer box burials of 1st-century date from the Joslin collection (Grave 30a/49; May 1930, 261) and St Clare Drive (Hull 1942, 59–65). The latter example was of Claudian date and included 10 Gaulish brooches, *terra rubra*, *terra nigra*, samian and an iron strap with wood impressions suggesting a wooden box.

Cremation burial was the dominant form of burial rite in Britain until inhumations became increasingly popular in the 2nd and dominant by the 3rd century. The date and speed of the change of rite in Colchester is not clear from existing information. Cremation burial in Essex appears to have survived as a custom into the 4th century, as examples are recorded at Kelvedon (Rodwell 1988, 42) and Wickford (Wilson 1970, 291). The inclusion of a Hadham ware pot in a late cremation at Abbey Field (GG408) is interesting, as the form, *Cam.* 365, appears to be a 4th-century ware (*CAR* 10, 297–9, 484).

Crematoria

Traces of three furnaces excavated at Gurney Benham House, next to the Royal Grammar School in 1937 have been interpreted as potential crematoria; the furnaces were built of tile and local conglomerate and had a tiled floor. A chimney flue and an area of burning 0.61m–

0.76m wide and 2.1m long were noted, along with traces of possible burnt bone (ELM988, ELM989, ELM990; Hull 1958, 258–9, fig 122; Black 1986, 210).

Inhumations

As already noted, the transition from cremation to inhumation burial in the mid-late Roman period cannot be closely dated. Nor is there a convincing reason for the change in rite, which may simply represent a change in fashion. For some reason the variety of burial customs evident in the 1st and 2nd centuries simplified into an increasingly uniform ritual involving supine inhumation within a wooden coffin. The transition in Colchester began sometime between *c* AD 150 and AD 275 (CAR 9, 264). An inhumation burial in the walled cemetery at the Grammar School has been recorded as Antonine in date (Hall 1944, 77, fig 7, no. 24), but may in fact date to the 3rd century (Philpott 1991, 58). The earliest inhumations from Butt Road and St John's Abbey grounds have been dated to *c* AD 250–300 (CAR 9, 264). Inhumations are recorded north, south and east of the walled area and are generally found closer to the town walls than are cremations, suggesting a contraction of the suburbs in the 3rd and 4th centuries.

Only two stone coffins have been recorded from Colchester, one from Burlington Road, near the Butt Road cemetery (GG375) and one found reused as a step on the High Street (GG153). Lead coffins are more common, with 21 examples of either lead-bodied or lead-lined coffins recorded. There is some evidence to suggest that lead coffins were placed inside wooden ones (GG349; CAR 3, 143–5; CAR 9, 123). Four lead coffins and seven wooden ones from Butt Road contained gypsum or some other form of lime plaster, the use of which is a practice often linked with the desire to preserve the body in preparation for the literal resurrection. However, similar grave packing has been found in apparently pagan burials in other settlements (CAR 9, 123–5). The lead coffins were often decorated, with scallop shell, bead and reel reliefs on the lid and sides. Sometimes strips of lead were nailed internally along the joints of a wooden coffin. Colchester also possesses an example of the very rare 'pipe burial', found at Creffield Road, south of Lexden Road (Laver 1889b, 273–6). Here a lead pipe was located over the head of the corpse; this was possibly an imbibing pipe to allow the passage of food and drink into the coffin, perhaps indicating a specific rite or a fear of being buried alive.

Intramural burials

A number of burials found within the walls may be late Roman or sub-Roman in date. None of the bodies was accompanied by grave goods or traces of coffins and no consistent orientation can be determined. Three bodies from East Hill House and Culver Street have been radiocarbon-dated as broadly Roman (CAR 6, 323). These include the body of an adult male discovered in the grounds of East Hill House, (south of the East Gate) in 1983, which was dated to AD 132–533. It was accompanied by an infant (*ibid*, 375–8). Both had been carefully decapitated after death and the heads had been placed between the knees (Clarke 1979, 372–6; Merrifield 1987, 72; Ross 1999, 26). The body of a young woman lying directly on a tessellated floor was uncovered nearby in the Berryfield in 1928. The burial could have been sub-Roman, although the fact that the body was neatly extended could mean that it lay in a grave cut that happened to extend down to the pavement level and a medieval date for this burial cannot be ruled out (Hull 1958, 218; Crummy 2001, 130). At Culver Street two bodies were found within the 4th-century barn (MON608). One had been laid out flexed on its side in a pagan manner. Elsewhere, two inhumations were found at 65 High Street (CAT report 5/76b) and another at William's Walk, off Maidenburgh

Street (CAT report 5/82d), both potentially sub-Roman. Drury has argued that the former are in fact Middle Saxon in date (1982, 385–7). The presence of late Roman burials within the walls could suggest a collapse of the legal restrictions on intramural burial.

Other burials

In St John's Street a skull with an unhealed cranial fracture was recovered from dump material of late 1st- to mid-3rd-century date (Benfield and Garrod 1992, 37). The skull may be from a decapitated corpse, similar to the pre-revolt bodies found at Balcerne Lane, placed near the Head Gate (*CAR* 3, 94–8). Inhumations have also been recovered apparently without coffins at, for example, Butt Road (*CAR* 9, 13, 105–11) and just to the east at Cedars Road (GG270–2, 273a, 287; Rudsdale 1931). The latter instance included a crouched decapitated burial, and the other inhumations appeared to have been dismembered (*CAR* 9, 266). Elsewhere, decapitated burials have been observed within the walled town (above) and at Butt Road (Benfield 2000a). Such burials could be interpreted as low-status individuals or criminals who had not been afforded a 'normal' burial, or they may represent obscure burial rituals not yet understood.

Evidence for Christianity

Christianity became the formal religion of the Empire under Constantine the Great, after the Edict of Milan in AD 313. A year later British bishops are recorded to have attended an ecclesiastical gathering at Arles in Gaul, pointing to the existence of a sizeable Christian community in the province at this time (Frere 1987, 332). It is possible that a bishop from Colchester attended the Council of Arles in 314, with all the implications for the level of Christian organisation within the town that this conveys. Unfortunately, however, the documentary reference to Colchester is corrupted and Lincoln or Cirencester are other possible candidates (Esmonde Cleary 1989, 47). As the senior *colonia* the city would have been a strong candidate for a bishopric, but tangible evidence for a Christian presence in the town is fragmentary.

Some of the existing temples remained in use into the mid-4th century, implying continuing affinity to pagan ideas, although Hull has argued that the poor state of survival of excavated temples and the absence of cult objects from these sites points to a suppression of paganism in the later Roman period (Hull 1958, 113). It is difficult to identify Roman buildings associated with Christian worship. At Balcerne Lane the ambulatory of the pagan temple (MON418) retained its *cella* after the outer wall was demolished in the 4th century, possibly suggesting that it may have been converted for Christian use (*CAR* 3, 125). Other structures for which Christian adoption has been proposed include the aisled building (MON608) at Culver Street, which was suggested as a possible church (*CAR* 6, 112–16) but might be a barn or warehouse (Faulkner 2000, 128–9). The site of St Martin's Church in *Insula* 11 has been suggested as another possible late Roman or early Anglo-Saxon (5th-century) church site due to the presence of possible 'Anglo-Saxon' burials and Roman pottery including four complete vessels (Rodwell and Rodwell 1977, 30). A late Roman church on the site is unlikely due to the improbability of Roman inhumation taking place inside the town walls and the non-funerary nature of the pots (Watts 1991, 104–5). A possible Roman antecedence is also suggested for St Botolph's Priory church (Rodwell and Rodwell 1977, 37; Crummy 1980a, 274). This hypothesis is given slightly more weight by the discovery of a Roman wall on the site (ELM1162; Crummy 1992b, 10). Finally, it has been suggested that the Temple of Claudius was converted to Christian use in the later Roman period, based on conjectures regarding later alterations to the temple and parallels

with other sites (Drury 1984, 33–5).

Presumed Christian symbolism does appear on a small number of finds from the town and points to the presence of believers in the city during the 4th century. A glass rim from North Hill was engraved with a fish forming part of a letter C or S and may be a Christian symbol originating from a workshop in Cologne (COLEM:1908.1603; Charlesworth 1959, 44–6; Watts 1991, 152; Mawer 1995, 30, C6.G1.3). A rim sherd excavated in Castle Park is cut with an approximation of the Chi-rho symbol (Hull 1958, 186; Mawer 1995, 37, C8.Po.10). Another possible Chi-rho symbol scratched on a clay roundel is mentioned from Colchester (Green 1976, 217). A possible Christian connection is also suggested by an inscription on a bronze spoon found in 1847 under the west wall of the town, which reads 'AETERNUS VIVAS' or 'Aeternus, long life to you' (Mawer 1995, 45, C9.Si.3). Other finds include a presumed candleholder with an Iota-chi (*CAR* 2, 168, fig 207, no. 4709) and a Chi-rho graffito (Drury 1984, 48). The decoration on a lead coffin from Butt Road – a cross and circle device with 'S' motifs, zigzag and circle pattern and scallop shells – is considered by some to be a clear indication of Christianity (Watts 1991, 53). Elsewhere in Essex, Christian influence is suggested by a Chi-rho graffiti from Kelvedon (Wickenden 1996, 80; Rodwell 1988, fig 42), a buckle engraved with a peacock pecking a small fruit tree from Harlow, and a similar strap end from Rivenhall (Bartlett 1987, 117).

The later phase of the Butt Road cemetery, consisting of 669 neatly managed east–west graves and an associated apsidal structure, have been interpreted as Christian. A fundamental problem with the identification of such cemeteries is that few burial rites appear to be exclusively Christian and most can be found in pagan contexts. Lack of grave goods, orientation and use of lime need not be exclusively Christian traits. In addition, the planned 4th-century cemeteries may simply be pagan precursors to later Christian burial grounds rather than early examples of such cemeteries. On balance, the orientation of the graves and the plan and juxtaposition of the building suggest a Christian cemetery with a mortuary church sited by it, but this explanation is not universally accepted (Millet 1995, 452–4; Struck 1997, 497–8). The presence of pottery or glass vessels in some of the graves would suggest that, if Christians were buried here, pagan traditions lingered on among the parishioners.



Fig 7.26 The site at Butt Road is one of only a handful of Roman churches recognised in Britain (Philip J Wise).

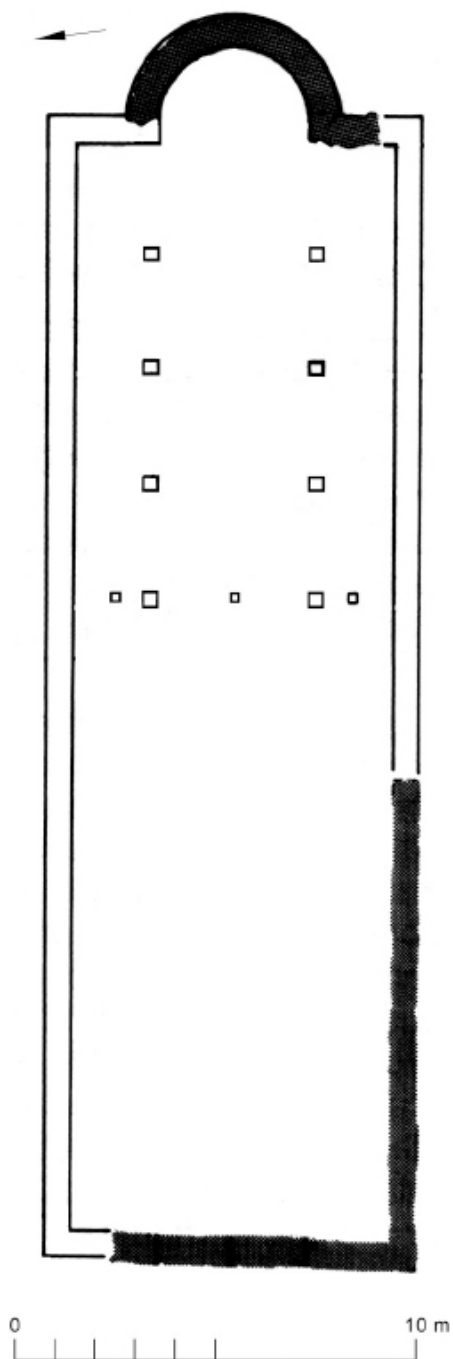


Fig 7.27 Plan of Butt Road Roman Church (Colchester Archaeological Trust).

Butt Road church mortuary monument

An east–west apsidal building (MON395) was situated next to a large inhumation cemetery at Butt Road and has been interpreted as a church (Figs 7.26 and 7.27). It was first recorded in a sketch by William Wire in 1845 and later plotted onto a copy of the 1876 OS map now held by Colchester Museums. Rex Hull excavated the structure in 1935, when he uncovered the apse and a nearby pit (CMR 1935, 7; interim reports in *J Roman Stud* XXV (1935): 214; XXVI (1936): 253; Hull 1958, 245). Another excavation was undertaken by Dunnett in 1965 and a final comprehensive series of excavations was undertaken by CAT in 1978, 1979 and 1988, prior to the construction of the Butt Road Police Station (CAR 9, 164–76). The consolidated remains of the structure are now on public display next to the police station.

The building was prominently placed, as it stood on the slope above a small valley which runs east–west immediately outside the town walls. A large inhumation cemetery (discussed above) of perhaps 2,000 graves was located to the south-east. Coins found during the various excavations appear to date the construction of the structure to c AD 320–40 and it seems to have remained in use into the late 4th century. The building measures 24.8m by 7.4m and had four to six bays and a small eastern apse. The roof was tiled and the outer walls, built of greensand and tile, were plastered and painted inside and perhaps whitewashed on the outside. Traces of Purbeck marble veneer and Purbeck burr were also recovered from the interior. There were internal partitions or colonnades of timber and wattle and daub which demarked aisles, and a possible north–south partition or screen. The internal layout was indicated by rubble-packed post pits; unfortunately, no evidence for a solid floor was found (Hull 1958, 245; CAR 9, 166).

The building began as a rectangular structure probably divided into two by a screen wall. A small apse was added to the eastern end around c AD 380, when aisles were inserted east of the dividing screen. Around 20 years later new aisles were added which stretched the whole length of the building, making this the latest example of Roman building work yet discovered in the town. The building was evidently repaired as a result of subsidence because part of it was built over deep made-up ground. The building was generally of poor-quality construction and this, along with the close-packed density of the cemetery, could indicate that the community it serviced was not particularly affluent (CAR 9, 164–202).

An interesting feature of the building was the recovery of numerous chicken and pig bones, including, unusually, a number of complete skeletons. Hull also recovered a Roman frying pan and iron bowl, supporting an interpretation of the building as a venue for burial wakes or funerary feasts (Hull 1958, 247, no. 14). Three rectangular pits excavated inside the building by the CAT were interpreted as possible graves, as iron nails but no bones were found (CAR 9, 175). The presence of graves could suggest that the building was a *martyrium*, or church built over the bodies of venerated persons or martyrs (Watts 1991, 122–3; CAR 9, 189; Crummy 2001, 123). Supporting evidence comes from Hull's investigation of the apse in 1935, which recovered a female skull and thighbone that had been placed in a pit sealed with a worked stone slab. The pit also contained debris from the superstructure and therefore perhaps dated to the 5th century (CAR 9, 175–6).

West of the apsidal building were the remains of a small utilitarian building (MON399) represented by a group of about 20 small pits centred around a rectangular hearth. Coin evidence provided a date range of c AD 335–88 for the structure (ibid, 178) and it has been interpreted as possibly either a kitchen or a baptistry (CAR 9, 187; P Crummy, pers comm).

Extramural development

Suburban settlement was mainly concentrated to the west, along the road to London.

However, extramural activity can be demonstrated on all sides of the town and our current understanding is biased by the pattern of excavation, which has been mainly focused to the west. We have no clear picture of the boundaries of the early *colonia* before the wall was constructed. At this time the legionary defences were slighted and the distinction between urban and suburban blurred, although after the revolt a defensive ditch was dug on an alignment yet to be precisely determined (*CAR* 3, 110–11). Spreads of early native and Roman pottery from the east end of the High Street and the bottom of North Hill, along with traces of Boudican destruction layers at the bottom of Long Wyre Street, could be evidence of early activity north, east and south of the pre-Boudican *colonia*: they are all located beyond the projected extent of the legionary fortress and its annexe, on land later enclosed by the wall.

Hurst has argued that the term suburb is inappropriate for Colchester, as the extramural context is provided by the *oppidum* (Hurst 1999, 131). Colchester is indeed dissimilar to Gloucester, which has a large suburban zone defined by burials around its outskirts (*ibid*, 120, fig 5). To the west of the *colonia*, burials were placed away from areas of occupation, but no formal boundary has been detected. Nevertheless, the Roman cemeteries do appear to separate ill-defined suburban areas to the west and south-west of the city. Furthermore, the strip building forms encountered immediately west and north of the walls are dissimilar both to structures in the *colonia* itself and also to settlement in the wider *oppidum*, although the apparent absence of this type of building from inside the *colonia* could be artificial, given the lack of evidence from principal street frontages. A potential distinction between urban and suburban is also suggested by the presence of Romano-Celtic temples outside, and not within, the walled town.

West of the walls

Our knowledge of the extramural settlement west of the town was greatly enhanced by the excavations for the dual carriageway at Balcerne Lane. Here, after the revolt, a new defensive ditch around the *colonia* cut through the remains of earlier structures, pushing the suburban boundary further to the west. A series of strip houses (MON413–6, MON441–2) located on the south side of the road on the external approach to the Balcerne Gate were found to have been built before the end of the 1st century, and another well-preserved house (MON417) was discovered 50m to the south of the road (Fig 7.28). The strip houses were similar in construction to their pre-revolt counterparts, consisting of a range of rooms flanked by a corridor, with plastered daub walls resting on timber ground plates and floors of daub or sometimes wood. Ovens and hearths were noted and, outside, gravel alleys and yards lay beside and behind the houses, at least one containing a wooden water main. One building (MON417) produced much painted wall plaster, including a gladiator scene (*CAR* 3, 147–53).

By the mid–late 2nd century the strip houses along the south side of the road had been upgraded into a range linked by a corridor along the street frontage. The buildings (MON420–3) all shared a substantial northern wall, which may have acted as a kind of façade along the street frontage. They also all had ovens at the rear which may have been inside or attached externally to the rear of each structure. One (MON420) revealed foundations of packed septaria probably associated with a partition wall, and patches of a mortar floor (*CAR* 3, 127–30). A second building (MON421) had been destroyed by fire, preserving remains of timber-framed walls on ground plates, parts of which survived *in situ* as charcoal. To the south of the building was a small fragment of mosaic (ELM142; *ibid*, 126). A third building (MON422) had a plank-built cellar which was probably secondary to

the original construction of the building. The planks were nailed horizontally to the timber studwork. The cellar had been backfilled and the wooden walls left to decay *in situ* (ibid, 126). A fourth building (MON423) contained a hearth and a probable robbed-out mortared foundation (ibid, 126).

The strip houses along the northern side of the London road were replaced in the 2nd century (MON444 and MON443 replaced MON442 and MON441). These new buildings were linked by a party wall set on mortar foundations and shared a southern footway, apparently surfaced with wood. The better-preserved building (MON444) had gravel floors, traces of a timber drain and ovens. To the rear of this building was a cellar 2.4m deep, built of septaria and tile, with a window or chute at the top of the east wall (ibid, 135–7).

The 2nd century saw the appearance of a more substantial high-status building (MON425) outside the Balcerne Gate. This had at least 10 rooms with mortared floors and timber walls resting on ground plates set on stone and mortar foundations; delicate painted wall plaster was also found (ibid, 153–4). A mosaic (ELM142) observed in 1876 and 1973–6 may have been part of this building (Hull 1958, 243; *CAR* 3, 130–2). The house was demolished no later than the mid-3rd century AD. To the east of this building stood a workshop (MON426) with walls of mortared septaria sitting on shallow foundations of sand and small stones. The building was associated with a double-chambered oven and an external oven comprising a reused storage jar (*CAR* 3, 130–2).

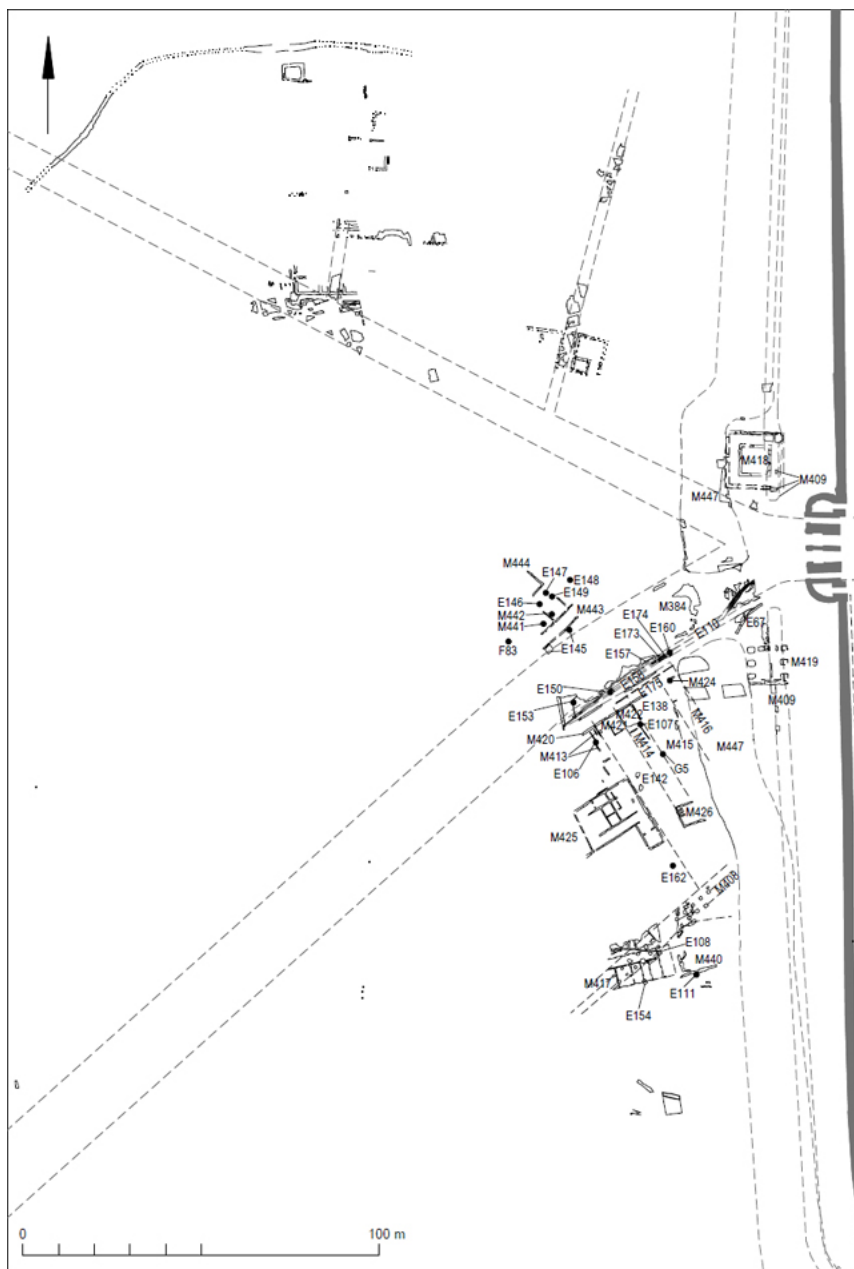


Fig 7.28 Extramural development at Balcerne Lane and St Mary's Hospital Site (insert to Fig 7.2) (Colchester Archaeological Trust).

Occupation beyond the Balcerne Gate extended well to the north of the London Road and may have linked up with the settlement at Middleborough, beyond the North Gate. A

Roman building (MON446) was discovered during excavations for a subway at the bottom of Balcerne Hill. The remains consisted of waterlogged and perfectly preserved wooden piles still *in situ*, together with part of a damaged mortar foundation. The piles had been driven into the base of the building's foundation trench and the highest surviving Roman levels were about 0.8m above the tops of the piles. The building may have been part of a complex of structures located in the area later occupied by the Victorian waterworks to the west, where other remains have been recorded. In 1808 a newspaper report recorded the discovery here of 'some spacious Roman baths, and earthen pipes of a peculiar construction, for the letting in and out of the waters, with a quantity of Roman pottery' (ELM441) (*Morning Chronicle* 6.9.1808 and 24.11.1808). The 1876 OS map records Roman foundations (ELM442) on the site of an 'Old Reservoir', and, during excavations for the new Anglian Water offices at the bottom of Balcerne Hill, coins and pottery were found, indicating the probable proximity of Roman deposits (*CAR* 6, 1024). Another sizable part of the western suburb of the town was explored during excavations, trial trenching and watching briefs carried out from 1999–3 within the grounds of St Mary's Hospital (Balcerne Heights) (Fig 7.28). A previously unknown Roman road leading from the Balcerne Gate towards Sheepen was revealed, as well as two side roads. On the north side of the main road was a large house which had been burnt down in the Boudican uprising. Following the revolt the site was reoccupied, as evidenced by a series of high quality masonry town houses, probably 2nd century in date, as well as a clay-lined water main. In the 3rd and 4th centuries the area was used as a cemetery and 64 inhumations were excavated during the investigations (S Benfield pers. comm.; interim report in *Britannia* 29 (1998): 406–7; Brooks 1997a, 19; Brooks 2002a, 10–15; Crummy 2003b, 10–15; CAT report in prep).

The situation to the west of St Mary's Hospital and Balcerne Hill is far more confused; undated burials are interspersed with sightings of walls and tessellated pavements (Hull 1958, 243). The tessellated pavements suggest that by the 2nd century, high-status buildings occupied the road frontage and land behind to an unknown density at least as far west as Rawstorn Road. Further west we must be cautious about wall sightings, as they could relate to mortuary monuments.

There is considerable evidence that land west of the town walls was used as a municipal dump from the 2nd century or earlier until the contraction of extramural settlement and the blocking of the Balcerne Gate in the late 3rd century. William Wire noted Roman material to a depth of 12ft (3.65m) at St Mary's Hospital (Anon 1844, 156; Hull 1958, 244) and Hull suggested that this area was a rubbish dump for the town as it contained a jumble of coins and brooches from the earliest to the latest Roman periods, although some material could have come from late burials in the area (*ibid*, 255). An evaluation at St Mary's Hospital in 1997 revealed pits containing animal bone, oyster shells, tile and pottery dating from the 2nd to the 4th centuries (Brooks 1997a). At Balcerne Lane substantial deposits of oyster shells up to 0.5m deep and dating to the 2nd century, lay on either side of the main London–Colchester road. Furthermore, an examination of the meat-bearing bone recovered from the Balcerne Lane excavation suggested that this area was a dump for processed cattle carcasses in the early Roman period (*CAR* 12, 143). By the late 3rd century activity at Balcerne Hill appears to have largely ceased, although a modest 4th-century structure was recorded north of the London road (MON384) and traces of dumping and sand quarrying were noted to its south (*CAR* 3, 130–2).

North of the walls

Significant extramural settlement also developed to the north of the town walls, on either side of the river Colne. During the late 1st or early 2nd century, strip houses were established at Middleborough. These included a timber-framed building (MON291) possibly of four rooms, with walls supported on ground plates set within shallow slots. Features included a hearth, an oven and a gravel yard or alley to the south (*CAR* 3, 155–6). To the south another ground-plate structure (MON292) was replaced at some time during the early 2nd century by a sub-rectangular timber-framed building (MON293) with painted and plastered daub walls, partially set on a stout mortar and septaria foundation. Four rooms and a long passage along the south side were noted (*ibid*, 158–9).

In the mid-late 2nd century, high-status buildings appear at Middleborough, as at Balcerne Hill. The timber-framed building MON293 was replaced by an impressive house (MON294) which was 45m long and consisted of rooms ranged around a central courtyard. Components included a workshop or shop, three mosaic pavements, tessellated pavements, wall plaster, various mortar and daub floors, hearths, pits, ovens and a possible altar. The building's foundations were of roughly coursed septaria set in mortar, and timber walls were indicated by a wood grain impression left in the top of a foundation. Along the street frontage was a veranda or portico with a floor of compact gravel. A second passage was situated along the north side of the courtyard and three further cross passages with tessellated floors were located within the building. The building was demolished c AD 300, when roof tiles and *tesserae* appear to have been salvaged (*ibid*, 166).

Two other nearby structures were dated to the same period as the courtyard house. A large building (MON295) with at least five rooms and a passage may have been a bathhouse. A furnace room or *prae-furnium* was identified, although the absence of any plunge baths was curious. The building contained fragments of tessellated pavement and small mosaics as well as underfloor heating and traces of a metal grill. Once again, *tesserae* appear to have been salvaged prior to demolition c AD 300 (*ibid*, 174). To the east, on the site of the Market Tavern, two rooms and a passageway of a building (MON297) were uncovered. The rooms had tessellated pavements and the floor of the passage was of daub (*ibid*, 180). Occupation at Middleborough, based on coin evidence, appears to have come to an end between c AD 295 and 335, suggesting that it lasted beyond that of Balcerne Hill.

North of the river Colne a series of walls, tessellated pavements and mosaics have been uncovered in the vicinity of the Victoria Inn, but as yet only one coherent structure has been identified – a substantial courtyard house at 26 North Station Road (MON672). In 2001 an evaluation immediately to the south of the Victoria Inn produced evidence for a high-status building, or buildings, dated to the 2nd century. Features included stone walls, a herringbone-patterned brick floor, a black and white geometric mosaic (ELM1268) and a curious sunken water tank or cellar constructed of *opus signinum* and stone (ELM1266). It was not clear if this structure was an internal or external feature. In its demolition debris was a late 4th-century coin (Orr 2001b, 5–6), although, given the fate of the Middleborough buildings, it might have been expected that this suburb would have fallen out of use in the late 3rd century (*CAR* 3, 155). At the Old Poultry Market site on North Station Road an evaluation in 1998 revealed a foundation trench for a building (ELM1094) sharing the same orientation as the Victoria Inn structures, providing the most southerly evidence for occupation north of the river (Crossan 1998b).

The road from Duncan's Gate may have led to a river crossing over the Colne. The road passed by a cemetery area, but there is also fragmentary occupation evidence including a timber-lined well (ELM909), rubbish pits (COLEM:1958.60; Hull 1958, 293, no. 69) and other pits and ditches (*CAR* 6, 860–2). One pit contained a fragment of marble veneer

(COLEM:1958.60).

South of the walls

The evidence for extramural settlement south of the town walls is, again, fragmentary, but suggests that a number of high- and low-status buildings were located here. During excavations for the pedestrian subway at Crouch Street part of a Roman building (MON627) was exposed; this consisted of a hypocaust, of which a central tile-built drain, a subfloor of *opus signinum* and 11 *pilae* were noted. This was probably the same hypocaust as the one uncovered under the adjacent pavement in 1925 (ELM447; Hull 1958, 243, no. 39). Another Roman floor (ELM445) was noted nearby in 1922, again, perhaps, from the same building (Laver nd a, 23.1.1922). The hypocaust room aligned with the small road known to run WNW–ESE 120m to the north, and may have been part of a house that fronted onto it (CAR 3, 138; CAR 6, 341).

On Maldon Road, 100m south-west of the city walls, a building (MON380) was discovered in 1971. The floors were of sandy clay and the walls were of mortar, tile and septaria. The floor sealed a slot containing Flavian pottery and the latest associated pottery was of 2nd-century or later date. Demolition debris included plaster of pink, white, red and mustard, and white and green stripe design. Although nearly 200m from the main street to the north, the building appeared to be aligned at right angles to it (CAR 9, 241).

Further east at 2 St John's Street, excavations in 1990 revealed a substantial structure (MON822) built over dumped material. Here a northern wall survived as a robber trench 1.9m wide with a large buttress of septaria and mortar on its north side. Pottery indicated that the building was demolished in the late 3rd or the 4th century (Benfield and Garrod 1992, 33–8). In 1928 observations made during building work for the Playhouse Theatre in St John's Street showed that 'to a depth of eight feet over most of the site the soil consisted entirely of Roman tip, containing pottery, animal bones, oyster shells and other remains' (CMR 1928, 29). During the construction of the St John's Street car park a concentration of Roman material, including painted plaster, was noted from the western part of the site (CAR 6, 876).

To the east, at Osborne Street, a mosaic (ELM465) consisting of 'white yellow, light blue and grey tesserae of small size' was found under the Bath Hotel in 1901 (CMR 1908, 9). Nearby a red tessellated pavement (ELM463) was also recorded about 4ft (1.2m) from the surface (Laver 1909, 88). Excavations at Osborne Street Car Park in 1988–9 revealed the remains of a building (MON458) of 1st- or 2nd-century date that may have fronted onto a Roman road running south from the South Gate. This had a daub floor with a burnt layer or hearth, and a tessellated pavement had been added in the mid-2nd century (Shimmin 1994, 45–59). On the opposite side of the road near the South Gate evidence for a wall (ELM1162) from a late Roman building was recovered during excavations on the site of St Botolph's Priory (Crummy 1992b, 10). The 1876 OS map of the town marks a tessellated pavement under the middle of Priory Street (ELM462).

East of the walls

The situation to the east of the town walls is curiously barren. To date only a handful of unsubstantiated sightings suggest Roman activity in this area. Roman foundations (ELM822) are noted on the 1876 OS map just east of the town wall on the south side of East Hill (Hull 1958, 293, 66). There is also an unpublished note in the museum recording that during the construction of a petrol tank for a garage at the bottom of East Hill a Roman decorated pavement (ELM501) was encountered at a depth of 1.5m.

Farms and villas within the dyke system

We do not know the extent of the *territorium* around the *colonia*, nor do we have any clear evidence for centuriation or the allotment of land parcels to military settlers. One might expect the pre-existing late Iron Age boundaries of the *oppidum* to be increasingly rationalised over time, if not completely realigned, and there is some evidence for this from cropmarks. At Gosbecks many curvilinear boundaries have more linear successors. In addition, a series of small Roman rectangular fields abuts the road to Colchester and is linked to narrow eastward-running trackways, forming a distinct field system aligned differently to the earlier pattern. Further east, at Kirkee McMunn Barracks, a settlement lies close to a series of rectangular or sub-rectangular enclosures and a series of small strip fields that are more characteristically Roman than late Iron Age.

Find spots of Roman pottery and tile from across the town's hinterland provide only a fragmentary picture of settlement character and density. Miscellaneous pits and ditches containing Roman waste have been recorded at several locations within the *oppidum*, but because of the extensive nature of the burial zones it is not always possible to distinguish domestic refuse from waste associated with funeral rituals. Nothing that could be confidently described as a villa has been discovered within the area of the *oppidum*, although there is evidence for buildings of some quality. For example, a high-status building in the vicinity of Spring Lane at Lexden is suggested by the recovery from a sandpit of two large bricks that were interpreted as voussoirs, which would have formed part of a door or window arch (Orr 2001a, 3). At Kirkee McMunn Barracks, traces of a hypocausted building dated to the 2nd–3rd centuries were recorded (Shimmin 1998b, 262–9). Less satisfactory observations include a reference to 'a Roman house' situated on the rising ground near Park Farm at Berechurch, south of Colchester (Gant 1972, 34) and two unconfirmed 'villa sites' suggested from aerial photographs at Greenstead Road and south of Harwich Road, to the east of the town (EHCR 2549, EHCR 2495). These are not confirmed by surface finds and may yet turn out to be erroneous.

North of the river Colne, roof and flue tiles have been recovered from Turner Rise (CAT Report 2/98E), and 3.5km north of the town centre brick and roof tile fragments have been recorded from the vicinity of Severalls Hospital (Crossan 2001b). Pottery, daub and roof tile were found in a 1st- to 2nd-century ditch near the Northern Approach Road, to the west of Colchester General Hospital (FND224), and nearby ditches produced late Iron Age and early Roman pottery, along with oyster shells and tile (FND225; CAT 1997/6). Further to the north-east of the town there is a general lack of evidence for villa settlement on the Tendring Peninsula, an anomaly in north-east Essex, where villa settlement is generally dense and evenly spread.

West of the town, pottery and flue tile have been noted north of the trapezoidal enclosure at Gosbecks (Hull 1958, 259). A high-status building near Gryme's Dyke is suggested by a mosaic recorded by Philip Laver at Stanway Green in the right angle of the dyke (ibid, 244). Elsewhere, in the grounds of Altnacealgach House, a short-lived wattle and daub structure was partially excavated along with a pit containing large amounts of Antonine pottery as well as oyster shells (CAR 11, 124–6). A possible early Roman enclosure was recorded nearby (Hull 1958, 271–3).

The 1930s Sheepen excavations recorded a number of minor structures associated with post-revolt deposits. In the south-eastern corner of Region 5 the remains of a timber building (MON436) and associated Hadrianic pottery were recovered; the building's destruction was clearly dated to the late 3rd century (Hawkes and Hull 1947, 121). A small Roman building (MON432) was noted just outside the western *temenos* wall of the temple

at St Helena School (ibid, 70). Towards Sheepen Springs, trenching in 1939 recorded a timber building (MON430), located to the north of two large Roman clay extraction pits, which was occupied in the 2nd and 3rd centuries (ibid, 121). A small Roman building (MON694) was excavated at Warren Field in 1959; this was asymmetrical, measuring 2.7m by 3.9m, and situated close to a group of pottery kilns (MON691–3). The walls were of Kentish ragstone with a mortar and rubble core, and traces of red and white plaster were also noted. The building appeared to have been deliberately demolished and a pit dug into the rubble was dated to the 4th century (Hull 1963, 42).

Farms and villas in the wider hinterland

On the lighter sandy loam soils of the Colchester gravel terrace mixed farming would have played an important role in supplying the city. We might also expect the expansion of agriculture in the Roman period into more marginal areas around Colchester, such as the heavier soils of the London Clay south of the Roman River, and this is suggested by the distribution of settlement and villa sites. To the north, beyond the river Colne, settlement evidence is sparser. The place-names here, like Little Horkesley, Great Horkesley, Brinkley and Ardleigh, imply the Anglo-Saxon clearance of woodland and perhaps point to either the presence of woodland here in the Roman period or abandonment and regeneration at a later date.

An arc of villas has been recorded around the southern and eastern side of the *oppidum*, forming a settlement belt 4–6km from the town walls. None of these villas has been the subject of modern excavations. Chris Going notes that the spread of villas across Essex is datable to the Flavian period and reaches its peak in the early–mid-2nd century (Going 1996, 103). At Alresford a corridor-type villa has produced flue tiles of Flavian date (Hull 1963, 37–8). At Rivenhall, some 16km from Colchester, a substantial winged corridor house set on masonry foundations was built in the early Flavian period. This is the nearest villa to Colchester to have been subject to structured excavation and it is notable for the quality of its construction and decoration, apparently demonstrating a high level of private expenditure well in advance of the construction of elaborate private town houses in Colchester itself. The presence here of late 1st-century mortared foundations can be compared with the situation in Colchester, where such foundations become common only in the early 2nd century (Walthew 1975, 198–9).

While a number of substantial villas were established in the region in the 1st and 2nd centuries, the density across East Anglia generally appears to be less than in central and western areas of the province. One hypothesis is that the imperial reaction to the Boudican revolt was to keep more land in direct governmental control in Trinovantian/Icenian territory (Percival 1976, 99). Alternatively, the local trend for timber and earth-walled construction may mean that sites have simply not been identified (Perring 2002, 77).

As noted above, there is no evidence for centuriation (the formal gridding of the landscape) around Colchester; instead, the landscape is dominated by irregularly laid-out farmsteads, fields and trackways with dispersed villas or suburban houses. At Silchester (Hants) the lack of villas near the town has led to the suggestion that some land was farmed from the town itself (Boon 1974, 243–8), and at York it appears that villa estates were not developed close to the *colonia*, with the nearest identified villa being some 10km away (Roskams 1999, 58). At Lincoln the picture is less clear-cut, with two elite complexes, perhaps parts of villa estates, located within a kilometre of the town (Jones 1999, 109), and at Gloucester at least two villa complexes are known within 4km of the town (Clifford 1933, 323; 1961, 42; Sermon 1996, 13–15, 17; 1997, 44–5), although there is also evidence for

native settlement in the same zone (Hurst 1999, 129–30). At Colchester farming appears to have taken place within and close to the town, but it has yet to be established whether land within the *oppidum* was worked from the town or from nearby farmsteads.

Dykes and miscellaneous structures

To the east and west of the *colonia* a number of linear earthworks have come to light which appear to be Roman in origin (see page 64–5). Some of these are relatively small features, perhaps the remnants of temporary military encampments, while others are more substantial and suggest a Roman defensive strategy that borrowed from the earlier native tradition of dyke building.

Probably in the late 1st century, and possibly after the Boudican revolt, a massive linear earthwork now known as Gryme's Dyke was built from New Bridge on the Colne to Baymill Cottage on the Roman River (Fig 3.2). There are distinct sections, Gryme's Dyke North, Middle and South, which need not belong to a single building phase. Dating for the Middle section was provided by a trench near the Peartree Business Centre, Peartree Road; here a *terra sigillata* sherd and a Claudian coin were recovered from the base of the rampart, indicating a date after AD 41. Much of the bank of Gryme's Dyke still survives, in places measuring 2m high and 12m wide, a scale which suggests a defensive intent as opposed to a purely territorial function. Midway along its course the dyke changes direction, forming a sharp right angle at Stanway Green, before continuing south and skirting the tributary valley running from the Gosbecks Spring. The kink in the dyke does not conform to any geographical obstacle and may perhaps relate to a need to account for pre-existing settlement or land divisions in that area. A small undated ditch known as Dugard Dyke runs between and parallel to Shrub End Dyke and Gryme's Dyke Middle, and two undated features known as the 'Palisaded Earthwork' and the 'Laver Ditch' may possibly relate to Roman roads running through Gryme's Dyke (CAR 11, 171–2).

East of Colchester another large linear dyke also survives for a considerable part of its original length. It appears to defend the coastal approach to the *colonia* at Berechurch and its linear morphology suggests a Roman date, although Hawkes believed it to be late Iron Age (ibid, 25–6). Elsewhere, excavations and observations at Altnacealgach House in 1939, 1955 and 1956 revealed traces of a possible second triple dyke (MON851), a palisade trench and a rhomboid enclosure of probable Roman date. The military flavour of these features encouraged Hawkes to suggest at the time that the legionary fortress was located in this area (CAR 11, 62, 124–6).

The current state of knowledge

by Philip Crummy

A few east–west streets in the former *retentura*, or rear part, of the fortress (that is, between *Insulae* 9a/b and 17a/b and *Insulae* 25a/b and 33a/b) are still problematic, and could conceivably be post-Boudican features (but this is unlikely). Otherwise the street system of the rebuilt town seems to have been exactly the same as the pre-Boudican one, and there is some evidence for the survival of building plots on the west side of Culver Street (CAR 6, 27–9) and at the site of the post office in Head Street (Brooks 2004b). Thus, as far as can be judged, the post-Boudican town was effectively the same as the pre-Boudican one, but with new buildings. The main differences were, presumably, that there were no reused military buildings, that the houses were more uniform in the way that they were built and that they were probably of a lower standard of construction. The post-Boudican development of the

town as defined in 1992, characterised as periods 4–6 (*c.* AD 80–*c.* AD 400) (*CAR* 6, 14–18, figs 2.10–2.11), still holds good. Period 4 (*c.* AD 80–100/125) is still problematic because it supposes the existence of a large defended annexe to the west of the walled part of the town, the evidence for which is limited.

Despite the large-scale excavations of the 1970s and 1980s, no complete house plans have been recovered, although large parts of several houses have been excavated. The Butt Road church is unusual in that the whole building has been excavated (*CAR* 9, 164–91). The so-called ‘mithraeum’ in *Insula* 15 is another with a fully excavated plan (Hull 1958, 107–15; Crummy 1980a, 271–2). Generally the latest buildings (which are usually 2nd–3rd century in date) have stone or rubble foundations and include rooms with tessellated, mortar or mosaic floors. Their remains are thus relatively durable and easier to study than 1st- and early 2nd-century houses. Investigations have tended to favour these buildings as well as pre-Boudican buildings. The least well-understood buildings are those of Flavian and early 2nd-century date: they have been investigated the least and are poorly preserved because, unlike their pre-Boudican counterparts, they have not been burnt. Methods of construction varied considerably with time and show clear typological development, as do houses and house plans (*CAR* 3, 20–2). Thus investigations of the whole range of buildings across all periods are important if the evolution of buildings and construction techniques is to be understood.

The quality of buildings inside the *oppidum* (as opposed to the *colonia*) is yet to be determined, although excavation opportunities have been limited. Perhaps the best example comes from the Kirkee and McMunn Barracks, where some poorly preserved parts of a Roman-period house or villa were recorded (Shimmin 1998b). No good example has yet been found of a house with foundations, despite the fact that inside the *colonia* this was standard from the Flavian period onwards. It may be that the absence of foundations on occupation sites may be the primary indicator of either surface-built timber-framed houses or even roundhouses. Either way, the lack of foundations or robber trenches on the sites of buildings is significant and indicates a lower standard of house construction than pertained in the *colonia*; this should be detectable even allowing for the effects of plough and other damage.

The town wall is dated to *c.* AD 70–85 and is seen as a response to the Boudican uprising (Crummy 2003a, 50–1). The date of the wall is yet to be established beyond reasonable doubt, but it does seem as if it really was very early by British standards. It has been well established that the rampart was a later addition to the wall (Crummy 1999b, 95–8). Variations in the fabric and construction of the wall on the western part of the circuit have been identified and equated with the work of different gangs who built the wall. However, interpretation is difficult and uncertain. Most of the gates are still poorly known, and the numbers and distribution of culverts and interval towers are only gradually becoming clear. The Roman brick in the wall is interpreted as being reused from demolished public buildings of the pre-Boudican town (Crummy 2003a, 51–2). However, for this suggestion to become credible, major pre-Boudican buildings need to be identified and shown to have incorporated substantial quantities of brick.

The number and size of the open spaces in the town changed markedly with time, and appear to be an indirect indicator of population levels. However, this assumes that, among other things, the average size of the buildings did not change, which of course was not the case. Nevertheless, the population probably never recovered to its immediately pre-Boudican level. Recovery was slow, with open areas only gradually being built over. The peak in terms of built-up areas was from about AD 150 to AD 250 when, by British

standards, Colchester had an exceptionally large number of large town houses, the presence of which suggests a prosperous town. A good indicator of relative wealth is the incidence of mosaic floors: more are known from Colchester than from any other town in Britain and they nearly all date to the period AD 150–250.

Few public buildings and monuments have as yet been recognised. Large foundations in some of the *insulae* (that is, *Insulae* 18, 20, 29 and 30) indicate the presence of public buildings, but the identification of these is otherwise uncertain. The fragments of *pilae* stacks in the external walls of Colchester Castle almost certainly come from public baths which were demolished for this purpose, yet the site of the Roman baths is not known. The so-called ‘mithraeum’ (Hull 1958, 107–15) was probably a waterworks and, if so, it may well have supplied baths which may have been located in *Insula* 30. The discovery of the circus, however, indicates the continuing importance of the town after the Boudican revolt.

There is plenty of evidence for the supply of pressurised water in the town, but, with the notable exception of the building in *Insula* 15, the sources of the water remain unexplored. Excavations in the Balcerne Lane area (*CAR* 3, 26–8) suggest that the Chiswell Meadow, to the west of the town, was a major source of water; there was probably a water tower here and some means, such as a series of waterwheels, for raising the water up the hill from the springs down in the valley.

The nature of the activity changed at the Sheepen and Gosbecks sites after the Boudican revolt. Both sites became places where large numbers of people assembled for fairs and markets. The level of activity at Sheepen seems to have dropped markedly after the revolt, and it developed into a major religious sanctuary with at least four temples, but pottery kilns show that it still retained a manufacturing role, albeit on a reduced scale. Gosbecks is less well understood than Sheepen. However, it seems to have continued as a farming area, with houses and utilitarian buildings scattered among the intricate network of fields, paddocks and droeways which emanated from the central farmstead. Gosbecks also developed as a major religious centre and, with its theatre, as a major place of assembly. It may also have had some kind of civic/governmental function. Like Sheepen, it retained an industrial role, as indicated by burnt areas and finds of slag (Hull 1958, 259–60). Parallels in Gaul suggest that there could have been a bathhouse at Gosbecks, and some support for this view is provided by fragments of box tile from around the temple site and a wooden water main which was traced over a distance of 250m in 1999 (Benfield 2008a). *Tesserae* in the ploughsoil near the north corner of the farmstead show the previous existence of at least one other substantial building at Gosbecks, apart from any which lined the Roman road where it is close to the theatre.

The architectural differences between the temple and theatre at Gosbecks and the temple and theatre in the *colonia* may reflect differences between the native and the settler populations. The theatre at Gosbecks is not well understood. The disposition of the external staircases suggest that two more are yet to be located and the wall which retains the *cavea* seems far too narrow if the building was to have reached full height, unless the upper part was completely constructed of timber. In addition, the evidence is poor for a wholly timber theatre pre-dating the turf one. The Gosbecks theatre is not of orthodox Classical design, but has affinities with theatres in Gaul. The auditorium was raised on a solid base of turf revetted by a single outer wall, and did not incorporate a covered veranda; the *scenae* was reduced to a simple wooden stage flanked on either side by a single wall. A similar native influence is apparent in the Gosbecks temple, in that it is of the Romano-Celtic rather than Classical type. In contrast, the theatre in the town and the adjacent temple to the deified emperor Claudius were of Classical type. The plan of the theatre is incompletely known and

problematic because of a wall which abuts the south side of it (Crummy 1982b). However, it would appear that the building, like Roman theatres around the Mediterranean, had an auditorium on stone and brick vaulting arranged so as to support a portico around the upper perimeter.

The careful and exhaustive work of Robin Symonds and Paul Bidwell on the pottery from the town centre, now published (*CAR* 10), complements the earlier study by C F C Hawkes and M R Hull on the pottery from Sheepen (Hawkes and Hull 1947, 168–286). About 40 kilns have been recorded at Colchester (Hull 1963; Rodwell 1982, 33–7; *CAR* 3, 182–4; *CAR* 6, 338–40). They are easy to recognise in the ground, and as a result some of the kilns are single isolated discoveries with no record of any of the supporting or related structures which must have existed. It is difficult to place the potters in the community, either physically in terms of where they lived or socially in terms of wealth and status. There are hints that this may one day be possible, however; stamps reveal the names of migrant potters from abroad who set up workshops in Colchester and elsewhere (*CAR* 10, 209–11), whereas pottery seconds in thinly furnished graves near a pottery kiln hint at a much less prosperous group of potters north of the river Colne (Shimmin 2008a). There is some clustering of kilns, the most significant group, which includes the samian kiln, being on the Warren Fields at Sheepen.

Cremation was the normal burial rite until the 3rd century, when inhumation superseded it (*CAR* 9, 264). However, a few cremations from one site (Abbey Field; Crossan 2001a) suggest that cremation as a rite persisted into the 4th century. The significance of changes in the distribution of burials has been highlighted (*CAR* 9, 263). Burials closest to the walled part of town are dominated by inhumations, whereas further out cremations predominate. This suggests that the town's suburbs shrank before or soon after inhumation became the normal mode of burial, which is probably in the second half of the 3rd century. This contraction of settlement outside the walls in favour of habitation inside the walls thus freed land for burial which had not been previously available. Two recently excavated cemeteries at Abbey Field (Crossan 2001a) and Turner Rise (Shimmin 2008a) revealed a contrast in the quality and number of their grave goods. This suggests that different cemeteries could each serve a different group of people, and that some groups of people were richer than others. It may be that large cemeteries in desirable locations, such as next to a church, could and probably did have family plots, whereas smaller cemeteries such as the one at Turner Rise were burial places for individual families. The Butt Road inhumation cemetery produced evidence for family plots within the same cemetery (ibid, 51–4, 92–3, 156–7).

The apparent evidence for a sharp decline in the built-up areas of the town in the late 3rd century is well established. Excavations inside and outside the walled part of the town have shown that the suburbs at Balcerne Lane and Middleborough shrank to practically nil and that many houses within the walls were demolished without replacement (*CAR* 6, 18–20). The evident decline matches observations of a decline in towns elsewhere in eastern and southern Britain generally in the latter part of the 3rd century onwards (Faulkner 2000, 121). However, it is clear from various sources, such as coin loss and cemeteries, that there must still have been a substantial population in Colchester throughout this period, and the question which needs to be answered is the degree to which the population redistributed itself in the town rather than declined. Opportunities are limited for excavation along the High Street, and the remains there are poorly preserved because of later activity, especially the construction of cellars. However, the latest Roman occupation levels yet recognised in Colchester have been found on sites along the High Street frontages at the Cups Hotel

(*CAR* 6, 333) and possibly Angel Yard (Shimmin and Carter 1996, 66). Too few late sites have been identified to justify any firm conclusions, but this raises the possibility that the demolition of many of the large houses of the period AD 150–250 was matched by an increase in density of occupation along the High Street in a way which foreshadowed the morphology of the medieval town.

The transition from Roman to Anglo-Saxon Colchester remains obscure. The Artillery Folly coin hoard of clipped *siliquae* reveals a recognisably ‘Roman’ town in AD 409 if not a little later (Burnett 1984; Crummy 2001, 129). The date for the changeover, whether this was sudden or gradual, remains as it was in the 1970s, when it was provisionally put at c AD 440/450 on the assumption that Anglo-Saxon Hut 2 at Lion Walk is post-Roman (*CAR* 1, 5–6; *CAR* 7, 23; Crummy 2001, 129–30).

Preservation

The late Roman town is subject to greater damage through post-Roman pitting and trenching than the pre-Boudican colony, but, like the latter, there are large areas well behind the medieval and later frontages where the remains are relatively well preserved. House foundations and hypocausts have been extensively robbed inside the walled area, although preservation is generally better outside. The latest deposits were usually destroyed by later cultivation and ground disturbances of various sorts. Animal bone and other faunal remains are usually fairly well preserved, with good preservation of surface detail. Copper alloy and glass are generally quite well preserved, but the survival of ironwork is very poor. Waterlogged deposits exist just outside the walled area to the north and south of the town as well as in *Insulae* 1a to 4/5. The spring in the possible waterworks in *Insula* 15 suggests that similar deposits may exist in *Insulae* 6 to 8 and 15. Preservation within the *oppidum* is as stated for the late Iron Age and early Roman period (see pages 56, 75–6, 97–8).

Importance

Despite the ascendancy of Londinium and the foundation of other *coloniae* in Britain, Colchester remained one of the province’s major towns and a place of maximum Romanisation. It was originally the foremost town in the province of Britannia and centre of the imperial cult. Being the first of its kind in Britain, its stone defensive wall was a physical expression of the town’s high status. Colchester’s origin as a *colonia* settled by Roman citizens and its coastal position in the south-east of Britain, facing continental Europe, ensured that the place was as Roman a town as any in Britain and a good deal more so than most. The workmanship of a few of the mosaics matched the quality of fine pavements abroad. Evidence for the manufacture in the town of samian and picture lamps, as yet unattested elsewhere in Britain, revealed immigrant craftsmen from the continent. A house at Head Street underlined the foreign ancestry of some of the inhabitants of the town by incorporating a garden pool (Brooks 2004b), a feature more familiar in the Mediterranean than Britain.

Being a *colonia* planted inside a native *oppidum*, Roman Colchester has much to offer as a place in which to study the interactions between Romans and Britons and the process by which the latter adopted a Romanised way of life. Sheepen and Gosbecks in particular are key sites in which to explore the relationships between the two groups and to investigate physically, on the ground, whether the two groups eventually became one.

Some early Roman houses in Britain have a military appearance; examples include the Claudian building in *Insula* XIV at Verulamium excavated by Frere (1972, fig 8) and the Eccles Roman villa (Detsicas 1977). Moreover, the forum-basilica seems to have evolved

from the military *principia* (Hassall 1979, 246–8). Reused buildings as well as new ones are evident in the pre-Boudican town at Colchester and, most importantly, it is normally possible to identify which is which. The *colonia* is thus important for the study of the evolution of town houses in Britain, particularly in relation to the influence of the army.

Roman Colchester, originating at the very start of the occupation, spans the whole of the Roman period in Britain, making it fruitful ground for constructing typologies for artefacts. Pottery, glass and small finds from Colchester often occur on sites in large quantities and, as a result, have formed substantial corpora which are used widely in archaeological research throughout Britain and beyond.

Potential for future research

Enough has been done to reveal distinctive stages in the evolution of the town in terms of its street grid, its built-up areas and its cemeteries. Future fieldwork should enable the development of the town to be charted more clearly and accurately. Most of the town's public buildings have yet to be identified. Important buildings as yet unlocated are the public baths and the basilica, and the theatre is yet to be closely dated. The date of the town wall needs to be confirmed. More sections behind the town wall will undoubtedly help. It is now known that the wall is built on top of wooden piles where the course of the wall is below the spring line and the ground subject to high ground water (in other words the west part of the north stretch of wall). At the Sixth Form College during a deep excavation against the northern part of the town wall several samples from wooden piles were taken for dendrochronological dating but the results were inconclusive (Brooks *et al* 2009, 61, 67 and 73). Much more work remains to be done on the town's defences. Little is known about most gates, and the towers and turrets are not fully mapped. The existence of the supposed Flavian annexe on the west side of the town can be validated or discounted by excavations along the projected course of the enclosure ditch on its south side.

As in towns generally, the commercial and market functions of Colchester were central to its existence, yet the numbers and locations of the shops are unknown for the post-Boudican town. The Boudican deposits point to the existence of many shops lining the High Street and other streets too, and a similar situation is bound to apply to the post-Boudican town, but it is not easy to identify shops unless they have been burnt or destroyed in some other way so as to leave some of the stock behind. Clearly, this is a major problem for the excavation of any town, not just Colchester. Sites along the main street frontages, especially the High Street, are vital in this respect even though the prospect of finding evidence for commerce is limited. Allied to this problem is the extent to which, if any, there was a relocation of houses and other buildings in the late 3rd, 4th and early 5th centuries along what are now the High Street frontages, and whether such an increase in the density of buildings represented a morphological change in the layout of the town which anticipated that of late Saxon and medieval Colchester.

Much of Gosbecks in the post-Boudican period remains to be explored. The date and nature of the occupation to either side of the Roman road to the *colonia* could be established through excavation and this will help to put the temple and theatre in a wider context, which at present is missing. The excavation of more extramural sites dating to after the Boudican period should reveal whether there was a significant difference in the quality of build of houses in the *oppidum* as opposed to the *colonia*. This should prove to be an important indicator of how the Britons fared under Roman occupation. Excavation elsewhere within the *oppidum* should reveal much more about the layout of the native settlement and to what extent its droveways, fields, settlement sites and cemeteries were

affected by the Roman occupation. However, large areas would need to be examined to achieve results such as these and for much of the *oppidum* this is no longer possible.

8 Early Anglo-Saxon Colchester, 410–916

by David Radford

Introduction and historical framework

The early 5th century saw colonisation of the east coast of Britain by settlers from southern Denmark and northern Germany. These farmers, traders and warriors brought with them a new language, a form of English, and a rejection of the urban ideals and Christian beliefs common to the inhabitants of *Colonia Victricensis*. The speed and character of Anglo-Saxon colonisation are still disputed and therefore of great interest to archaeologists. History, in the form of the *Gallic Chronicle* of AD 452 and the writings of the native British scholar Gildas, records a decisive Anglo-Saxon influx in the middle decades of the 5th century (Burgess 1990, 185–96; Yorke 1990, 2–3). However, excavations at West Stow in Suffolk (West 1985), and Mucking (Hamerow 1987) and Heybridge (Drury and Wickenden 1982), both in Essex, could indicate an earlier arrival of Anglo-Saxon settlers in the parts of Britain geographically closest to the Rhine. Unfortunately, the dating of excavated material to the early 5th century remains an extremely problematic exercise.

The end of the imperial administration in Britain saw the final collapse of the late Roman economy and consequent loss of commercial distribution systems. During the first quarter of the 5th century coinage and wheel-thrown pottery went out of general circulation, with the result that it is very difficult to assess the survival of Romano-British culture. Assuming that the native population organised their defence around regional or city-based political structures, the apparent early collapse of activity in the Roman towns suggests that Essex succumbed rapidly to the invaders. Graves containing late Roman military equipment and Anglo-Saxon-style accessories have been seen as compelling evidence for the early use of Anglo-Saxon fighters by the native Britons in the South East. A popular theory was that these communities of mercenaries and their families helped to speed up the collapse of native power structures and formed the basis for the new settlements (Myres 1986, 87–9). Recent thinking has moved away from this model, however, and the extent to which large-scale population displacement occurred is also now questioned more rigorously, with recent theories favouring higher levels of cultural and ethnic integration (Hodges 1989, 29–36).

A small cremation and inhumation cemetery at North Shoebury, a possible mercenary burial ground, is one of the few cemetery sites in Essex that appears to be exclusively 5th century in date (Tyler 1995, 46–52; 1996, 110). It is also one of a number of Essex sites where Anglo-Saxon burials appear to have been placed in association with earlier prehistoric or Roman burials; other examples include cemeteries at Ardleigh (Brown 1999, 183–4) and Springfield Lyons (Buckley and Hedges 1987, 15, fig 11), which both integrate Bronze Age features. Settlers may have attempted to claim legitimacy and imply continuity by creating a physical relationship with past social orders.

The settlers brought with them a far less hierarchical social structure than that which had existed under Roman rule, and a pattern of agriculture based more upon community interests than were the large farming estates of the Roman Empire. However, the idea that large tracts of farmland reverted back to primordial forest during the ‘Dark Ages’ is no longer held to be valid. Some historians would even have continuity of farming practices, with Saxon or Anglian overlords adopting the Romano-British peasantry as underlings

(Dark 1992; Schama 2000, 46). Such continuity of native field systems and settlement is not readily apparent in the vicinity of Colchester, and the nature and scale of occupation in the town itself certainly does not point to such a seamless transition.

The pattern of Saxon settlement across Essex in the 5th century appears to be one of dispersed hamlets and farms without a clear settlement hierarchy or evidence for any sort of political structure. The nearest evidence for political hierarchy and organisation would be the lingering British enclave at London (Clark 1989, 5–6) or the substantial Cambridge Dykes (Malim *et al* 1996, 27). Large-scale excavations of early Anglo-Saxon settlements in the region have been undertaken at West Stow (West 1985) and Mucking (Hamerow 1987), and several smaller sites have also produced occupation evidence (Tyler 1996, 108–10). Structural features commonly comprise the traces of sunken-featured buildings or *Grubenhäuser*; there is generally little evidence for either settlement boundaries or social differentiation between buildings. Even the evidence from the excavation at Mucking, which comprises some 256 buildings and 867 burials, can be interpreted as representing a shifting hamlet which evolved during the 5th to 8th centuries rather than a large bounded village (Hamerow 1987, 256–8). Studies of settlement continuity and social hierarchy in Essex have been hampered by there being so few excavated sites where early and middle Saxon cemeteries exist in association with settlement evidence, the exceptions being Mucking and Ardale School (Tyler 1996, 110).

In the 6th century Saxon tribal groupings in the region appear to have coalesced into an East Saxon kingdom, with London emerging as a central place by c AD 600 (Clark 1989, 10–11; Cowie and Harding 2000, 182–3). Colchester is located at the eastern edge of the kingdom, around 10km south of the river Stour, the geographical boundary between the polities of the East Angles and the East Saxons (the ancestors of modern East Anglia and Essex). Finds associated with both these groupings – for example, cruciform and circular brooch forms (Hills 1999, 184) – have been found in the Colchester area.

The 7th century saw the consolidation of the Anglo-Saxon kingdoms and the gradual return of Christianity to south-east Britain. There is no direct evidence, but Colchester may have re-emerged as a royal estate (*villa regalis*) towards the end of the 7th century (Rippon 1996, 120). Given the utility of its defensive circuit, a revived administrative, economic and religious status is possible but not proven. The port known as ‘Old Hythe’ at Old Heath could perhaps date back to this time, the only supporting evidence being a single 7th-century Merovingian vessel apparently found in the vicinity. Elsewhere, there is evidence demonstrating the socio-economic power of a local estate owner at Mersea Island, where a massive wooden causeway of between 3,000 and 5,000 piles was dated by dendrochronology to the late 7th century (Crummy *et al* 1982, 83).

Early and middle Saxon industrial sites are rare in Essex and there is little evidence for manufacturing in the vicinity of Colchester, with the notable exception of the ironworking complex at Rook Hall, Little Totham, near Maldon (Adkins 1989, 262–3). Here remains of several smelting furnaces and smithing hearths were recovered, and charcoal from one furnace gave a radiocarbon date of 607±60 AD (GU-2151). There are also few data regarding methods of coastal exploitation such as salt production, fishing and sheep herding, although wooden fish weirs have been recorded at Bradwell on Sea and Mersea Island (interim report in *Essex Archaeol Hist* 24 (1993): 209; Crump and Wallis 1992). The weir at Bradwell has been radiocarbon dated to between AD 640–75 and 882–957 and may be linked to a nearby monastic foundation (Rippon 1996, 124).

The evolution of Essex’s rural landscape is distinct from the classic landscape of strip farming in two or three open fields around a nucleated village, as seen extensively across the

English Midlands. Rather, occupation is characterised by dispersed manors and hamlets each with their own fields, these sometimes incorporating older field systems of Roman or prehistoric date. The origins of this settlement pattern are obscure, but there is some evidence for the contraction and abandonment of early Saxon sites followed by expansion of settlement in the middle and late Saxon periods (Hamerow 1991, 14). Regional excavations of middle-late Saxon church-hall complexes have failed to demonstrate whether these served as the basis for later nucleated settlement (Rippon 1996, 124). In fact, our understanding of the development of Christian infrastructure in Essex is fragmentary. Many of Essex's churches are thought to date to the very late Saxon period, although middle Saxon churches have been suggested at Cressing (Hope 1984, 35–6, fig 26.1), Rivenhall (Rodwell and Rodwell 1986, 85–90, fig 60) and West Bergholt (Turner 1984, 52, fig 35.1).

By the beginning of the 8th century Essex had fallen under Mercian control. Then, from c AD 825, it came under the overlordship of Wessex, finally being incorporated into the West Saxon kingdom in c AD 860. Increasingly frequent Viking raids on Britain in the 8th century culminated in a major Viking army landing in the 860s. This force pressed the Anglo-Saxons into a peace settlement that resulted in permanent Viking occupation and the formation of the Danelaw. Essex is traditionally thought to have fallen under Danish control, but may in fact have remained a Saxon borderland (Williams 1996, 97): place-name and historical evidence suggests that Viking influence was confined to the northern reaches of the county, which may have remained in a state of flux. Around Colchester there are only a few Danish names: examples include Easthorpe, to the west (West 1989, 9). There is also little evidence for a Danish presence at Colchester itself, with the exception of an entry in the *Anglo-Saxon Chronicle* for AD 917 which records that Colchester was held by the Danes before it was retaken by King Edward the Elder, who repaired and restored it as a *burh*.

Past work

Until the 1970s little was known about the character of post-Roman settlement in Colchester. Saxon pottery had been found in small quantities within the town walls, and poorly recorded but important collections of metalwork were recovered from extramural quarry pits, building sites and the grounds of the Union Workhouse (St Mary's Hospital) in the mid-19th and early 20th centuries. From this material four ill-defined extramural cemeteries have been identified north-east, east, west and south of the walled town. Dredging of the river Colne in 1916 also produced a number of iron weapons of some interest.

In the 1960s pits tentatively dated to the 5th–7th centuries were noted at the NCP Car Park site on North Hill (Dunnnett 1967, 38) and at the Lorgarth site on Nunn's Road (unpublished typescript, Colchester Museums), but no structural evidence could be conclusively identified. A breakthrough came with the redevelopment that began in the 1970s, when large tracts of the intramural town were examined at Culver Street and Lion Walk, leading to the discovery of ephemeral Saxon buildings of 5th- to 7th-century date (*CAR* 1, 1–6; *CAR* 3, 73–5; *CAR* 6, 118–22). Hopes that High Street sites excavated in the 1980s and 1990s would produce further Saxon occupation evidence were only partly realised. At Angel Yard (Shimmin and Carter 1996, 38) and the Cups Hotel (*CAR* 6, 333) pits and depressions were recorded and dated with varying degrees of certainty to the 5th–7th centuries. Aside from these sites, residual sherds and miscellaneous objects have been recovered from smaller excavations or as stray finds from around the town. No excavated features have yet been securely dated to the 8th–10th centuries, and material from this

period is almost entirely absent from Colchester except for a handful of residual sherds.

Metal detecting from the 1990s onwards has produced a steady trickle of Saxon finds from the borough. These have tended to come from the parishes on the coastal side of Colchester, although this may be an accidental bias caused by disproportionate detecting in this area.

The finds evidence

by Nina Crummy

There is comparatively little material evidence from this period, but an important small assemblage has been found in a number of sunken-featured buildings within the walled town. The pottery and other objects range in date from the 5th to the 7th centuries, and the latter are typical of those found in Anglo-Saxon settlements in the region: that is, combs and spinning and weaving equipment. The very earliest material also has strong continental affinities (*CAR* 1, 1–6; *CAR* 5, 6, 22–3; 32–3; *CAR* 6, 118–22; *CAR* 7, 309–11). There are grave finds of similar date from outside the town (*CAR* 1, 6–24), and other chance finds, some from the later end of the period, from the town and the suburbs, including coins, dress accessories, weapons and pottery vessels (*ibid*, 6–24; *CAR* 5, 6; Dunnett 1967, 57–8; Dunnett 1971a, 24–5; Brooks 2004c, 64; N Crummy 2000, 120). The Saxon coins from Colchester have been reviewed recently by Michael Metcalf (1993, 80–93, 194). A small collection of antler-working debris found at Lion Walk may belong to this period (*CAR* 5, 88–91). The scatter of material stretches out to Old Heath, on the river, where a Merovingian pot was found (*CAR* 6, 21–2).

Material at the later end of this date range can be difficult to separate from later periods, as items such as the cow femur head and limestone spindlewhorls were made over many centuries, and hones of Norwegian ragstone and phyllite were imported from the 9th century into the late medieval or early post-medieval period (*CAR* 5, 30–3, 76–9; N Crummy 2000, 120–1). However, given the small number of excavated features datable to the 9th, 10th and early 11th centuries, it is likely that much of this widely dated material belongs to the Norman town. A few sherds of pottery demonstrate limited contact with France towards the end of this period (*CAR* 7, 258–61).

The archaeological evidence

by David Radford

Occupation

The three sunken-featured buildings excavated within the town walls suggest dispersed and low-level occupation among the ruins of the Roman town and a break in continuity between Roman and Saxon settlement (Fig 8.1). Associated pottery dated the earliest building, Hut 2, found at Lion Walk Site K, to the early 5th century (MON 516). The hut was small and comprised a characteristic *Grubenhäuser* hollow, which was probably covered with a timber floor at surface level. This interpretation is based on the irregular shape of the hollow and the presence of stones which projected into the hollow from the Roman floor through which it was dug (Crummy 2001, 135). The hut would have had a ridged roof supported by two upright posts, a form similar to the ‘two post’ or ‘two post derivative’ types identified as forming 90 per cent of the structures at Mucking (Hamerow 1991, 10).

The second building, also at Lion Walk (Hut 1, Site J), was of 6th- or 7th-century date

(MON515). It has been interpreted as being without a raised wooden floor because the hollow was apparently peppered with stakeholes and its base had the appearance of being trampled (Fig 8.2). The stakeholes formed clusters and, combined with shallow slots, appeared to represent the bases of cupboards and benches against the walls. The number of stakeholes implied the development of internal features over time, as they were too numerous to all be contemporary (*CAR* 1, 1–6; *CAR* 6, 118–20). However, the interpretation of these features as stakeholes is not universally accepted; an alternative explanation is that these are natural features, and consequently that a suspended floor was in use (C M Hills, pers comm). No hearth was found and the recovery of a broken loomweight and a spindlewhorl from the backfill of the hollow led the excavator to suggest that the structure was utilitarian in function, possibly being a weaving shed. However, such an interpretation needs to be judged against the practical aspects of weaving, an activity which requires good light. In addition, the stake patterning was incompatible with known Saxon loom forms, and alternative or joint domestic use is possible (Crummy 2001, 135).

A third building, found at Culver Street (Hut 3, Site B) and dated to the 6th or 7th centuries, was similar in structure to the last (MON593). Its floor was trampled and contained a dense pattern of possible stakeholes, though these were less obviously juxtaposed with the walls than those of the Lion Walk building. The sunken area measured 3.9m by 3.1m and was 0.6m deep.

These two later structures were both butted up against Roman foundations; in the case of the Lion Walk building this was originally interpreted as evidence that the settlers may have utilised a standing Roman structure. Subsequently, in the light of the Culver Street discovery, it has been suggested that the huts were simply positioned adjacent to foundation walls to avoid the unnecessary hard labour required to break out the septaria foundations (Crummy 2001, 136).



Fig 8.1 The early Anglo-Saxon town showing distribution of find spots, monuments and significant elements.



Fig 8.2 Hut 1, a sunken-featured building from Lion Walk, is one of very few pieces of evidence for an Early Anglo-Saxon presence in Colchester (Colchester Archaeological Trust).

A possible fourth hut was recorded at Culver Street (Hut 4, Site E) and consisted of a rectangular pit 5.5m by 2.8m and 0.4m deep with three evenly spaced postholes along each of the sides (MON610). However, it appeared to cut a Norman robber trench and so may not be Anglo-Saxon at all (*CAR* 6, 120–2).

Also at Culver Street (Site K), a freestanding, multi-flued, grain-drying oven was excavated, the date of which aroused some interest (MON573). It was constructed of reused Roman material which included box tiles, column bricks and hypocaust tiles, with many fragments having *opus signinum* still adhering to them. A curious aspect of the structure's construction was that it was unmortared and bonded only with sandy clay, perhaps suggesting that the community that built it lacked the technical skills for producing mortar, therefore suggesting a sub- or post-Roman date (P Sealey, pers com). An alternative explanation is that it was a late Roman structure reused at sometime between the 5th and 7th centuries for either baking or grain drying. The evidence for its later use comes from two or possibly three soot-coated vessels represented by fairly large 6th- or 7th-century sherds scattered through the ashy stoke pit fill and interior (*CAR* 6, 111). Wheat grains recovered from the ashy soil have been identified as the free-threshing variety common to the Anglo-Saxon period (*CAR* 7, 25).

Shallow circular holes containing ash and slag were discovered dug into a Roman floor in the garden of 'Lorgarth' (house) in 1963. Anglo-Saxon pottery and a bone spindlewhorl were found above the floor and the excavator speculated that the holes 'may have been Saxon hearths for some industrial working' (Blake 1964; *CAR* 1, 6). Nearby, a pit containing pottery of 6th- to 8th-century date was recorded at the NCP Car Park in 1965. This may have been connected with five large postholes, 'perhaps part of a large hut', which were cut through a Roman floor, although no levels were associated with these features (Dunnett 1967, 38). A watching brief at St Mary's Cottage in 1982 recovered two sherds of

grass-tempered pottery, one of which was thought to lie in a feature that could have been a sunken-featured building (*CAR* 6, 980). Along the High Street, a group of stakeholes and two shallow pits or depressions associated with 16 sherds of Anglo-Saxon pottery were recorded at the Cups Hotel in 1973 (*ibid*, 333), while at Angel Yard in 1986 a shallow pit was found to contain grass-tempered pottery (Shimmin and Carter 1996, 38).

Unstratified early Saxon pottery and two modified pig fibulae, probably of similar date, were recovered from the excavation at 21–31 Long Wyre Street in 1998. The excavator speculated that an early Saxon feature may have been missed, but on balance felt this unlikely (Brooks 2004c, 40). This site is near to a spread of antler-working debris of 5th- to 8th-century date found on Site R of the Lion Walk excavations (*CAR* 5, 88–91).

The possible Saxon origin of several Colchester churches is discussed in the next chapter. However, the church of St Runwald (now demolished), which stood on the High Street, is worth a mention, as the earliest ‘St Runwald’ is recorded in the 8th century. No physical evidence has been recovered to confirm such an early origin.

Coins

Aside from the clipped late Roman coins from Artillery Folly (*CAR* 4, 71; Burnett 1984, 163–4), only a small number of coins of early and middle Saxon date have been recorded from Colchester. The earliest is a solidus of Justin I (AD 518–27), although unfortunately the exact findspot is not known (Rigold 1975, 655, no. 1). A thrysma of Vanimundus was found in a garden on Queen Street in 1952 (*CAR* 1, 8). It is struck in pale gold and probably represents the final stage of debasement, around *c* AD 660. The archetype is Frankish, although the coin may have been minted locally in Essex (Metcalfe 1993, 81). Three sceattas have been recovered from Colchester to date, one from Castle Park (COLEM:1940.140) and one located only to Colchester (BMC type 8; COLEM:1903.563; *CAR* 1, 20). The third, from Head Street, is an imitation of a type originating in Kent in the late 7th century (Rigold Series A). Such forgeries are found in the kingdoms neighbouring Kent and in Frisia, where most are likely to have been produced; their presence in Essex implies trading links with the Rhine in the last two decades of the 7th century (Wise 2004, 28).

Elsewhere in the borough and outside the UAD study area, six sceattas have been found at Fingringhoe (COLEM:1999.54–55) and a further two 8th-century sceattas at West Mersea (series E and J: J Newman, pers comm). A penny of Offa of Mercia (*c* AD 787–92) is recorded from Layer de la Haye (COLEM:1999.53). The Fitzwilliam Museum, Cambridge, holds five sceattas of *c* AD 675–750, a coin of Offa (AD 765–92) and a styca of Æthelred II of Northumbria (*c* AD 854–62), all said to be from ‘Colchester’ (COLEM:1960.0001, 1977.0019, 1986.0087, 1994.0112, 1994.0168, 1996.0096 and 1998.0108).

Burials

A collection of 5th- to 7th-century finds probably from early Saxon burials has been recovered from north-east, west and south of the town walls along with a single cremation burial south of the town, off Mersea Road. All the finds come from areas within or close to suspected Roman cemeteries. A burial area (MON1010) is suggested north-east of the town walls, where two early 5th-century burial groups were recovered in 1971 and 1972 (Fig 8.3). One group consisted of a cruciform brooch, two rings and a fragment of brooch spring, and the other of a cruciform brooch, seven beads, a silver finger ring, a Roman silver coin pierced twice for suspension and a fragment of skull belonging to a woman of 50–70

years of age (*CAR* 1, 10). West of the town, at the Union Workhouse, two more cruciform brooches and an undated spearhead were found in the 19th century, pointing to the presence of burials and possibly a cemetery here (MON1007). One of the brooches has been identified as possibly 6th- or early 7th-century, and survives in the British Museum (*ibid*, 9).

To the south of the town walls, spearheads, knives and arrowheads were recorded at Butt Road, where antiquarian William Wire noted a 'Saxon burial ground' in the sand pits (MON1009) (Wire *nd*, 17.11.1843). Drawings of these finds have been used to date one of the spearheads to the 5th–7th centuries. A large body of finds has also come from outside the South Gate in the Mersea Road area, perhaps from a cemetery (MON1008). In 1873, three iron spearheads and a shield boss, probably from inhumations datable to the 5th or 6th century, were found during the construction of 10 Mersea Road (*ibid*, 14). The 19th-century collector George Joslin accumulated a number of Saxon finds and local archaeologist Dr Henry Laver is quoted in 1903 as stating that most of the shield bosses in the Joslin collection came from the Mersea Road cemetery (VCH 1903, *Essex I*, 327). The remaining spearheads, ferrules and complete pots collected by Joslin are all compatible with Anglo-Saxon types and datable to 5th to early 8th-century forms (*CAR* 1, 17), but the origins of these finds is unknown. Also from the Mersea Road area, 'Roman and Saxon arms and urns' are recorded in Fairfax Road on a map by Cutts published in 1889 (Fig 1.2), and a Saxon inhumation from Cromwell Road was accessioned by the museum in 1927 (Cutts 1889, folio map; COLEM:1927.7070). Another collection of objects said to be from Mersea Road, including 21 beads, 3 bronze buckles, the head of a radiate brooch and a bone comb, was accessioned in 1926 (*CAR* 1, 15–17). The datable finds suggest 5th- or 6th-century burials, although the group is not thought to be securely provenanced. Further south along Mersea Road, an unburnished grass-tempered pot of 6th- or 7th-century date containing cremated bone was found at the north-west corner of the Meanee Barracks in 1938 (*ibid*, 14).

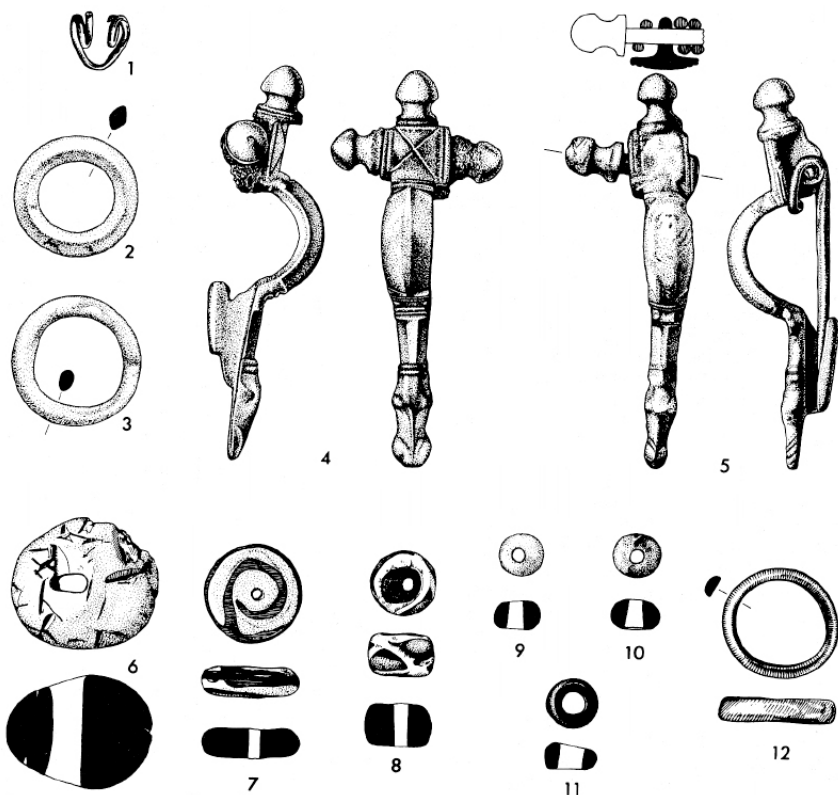


Fig 8.3 A group of Anglo-Saxon objects from the Guildford Road Estate, Colchester found in the early 1970s: 1 bronze brooch spring; 2–3 bronze rings; 4–5 bronze brooches; 6–11 beads; 12 silver finger-rings (from CAR 1, fig 13).

In contrast to the spreads of finds recovered without human remains, a number of inhumations which may be Anglo-Saxon or late Roman in date, but lack datable finds in association, have been found *within* the town walls. Six east–west inhumations on a Roman floor, ‘almost certainly early Saxon’ in date, were found in 1892 in Castle Park (Laver 1906, 122–5). Nearby, two inhumation burials recorded at 5 Maidenburgh Street in 1964 were also thought to be possibly Saxon in date (Niblett 1982, 342–6). In the south-east quadrant of the walled town two inhumation burials were found at East Hill House in 1983 (CAR 6, 378). One was an 18-month-old infant laid out east–west and the other an adult male laid out north–south, both with their heads severed and placed between their legs. These may be late Roman, as radiocarbon dating has produced a result of 1700±70 BP (Har-5986), corrected to 242–415 Cal AD (Stuiver 1986). In the same area a skeleton, possibly that of a girl, was found in 1923 lying on a mosaic floor in the Bury Field south of East Hill House (interim reports in *J Roman Stud* 12 (1922): 260 and *TEAS* 16 (1923): 295). The layer of topsoil under the body may indicate that the body was not a late Roman burial, as once thought, but Anglo-Saxon or possibly much later in date. Lastly, two burials were found inside the great 4th-century barn at Culver Street (CAR 6, 115–16). One of the bodies was laid out flexed and on its side in a characteristic pagan fashion. The barn appears to have

been standing when the inhumations were interred, suggesting a late Roman or sub-Roman origin.

Possessions

Anglo-Saxon finds from Colchester are modest and do not constitute a major regional assemblage. Finds from the UAD study area include: spears, swords, shield bosses, knives, bone combs, spindlewhorls, an annular loomweight, brooches, buckles, strap ends, pins, bronze rings, beads, a silver ring and an earring. The bulk of this material comes from the cemetery areas around the walled town.

The identifiable weapon types are two long seaxes of 8th-century date, four 'low cone' shield bosses and one of 'sugar loaf' type, and a variety of spears ranging in date from the 5th to the early 8th centuries. The brooches are a radiate brooch of 6th-century Frankish or Almannic type, a saucer brooch dating from the mid-6th to the 7th century and produced in the workshops of the upper Thames valley (*CAR* 1, 8; Dickinson 1976, 93), and four cruciform types ranging from the early 5th to the early 7th century in typology (*CAR* 1, 9–10), although these now have a revised later date (C M Hills, pers comm). Another cruciform brooch of Midlum and Volstad type was reported by a detectorist as coming from Colchester (Ager 1986, 149–50) and in 2001 an unusual Scandinavian-style brooch was claimed to have been found in Magdalen Street in Colchester (Wise forthcoming). A chip-carved strap end was found closer to the town at 26 Lexden Road, apparently lying on top of a Roman road, during an excavation in 1966 (*CAR* 1, 20). Eighteen beads were recovered from the Mersea Road cemetery; these were of amber, amethyst and dark, opaque and translucent glass, and were mostly of 5th- to 6th-century type (*ibid*, 16–17). The houses at Lion Walk and Culver Street produced domestic objects: bone combs, spindlewhorls and pottery; the only metal object was a copper-alloy ringed pin (*CAR* 5, 6, fig 2.3).

There is no trace of Danish occupation in Colchester except for two Viking-type axe heads found in the river Colne. These may indicate a Danish cultural influence on axe styles rather than the physical presence of the Danes, and could be late Saxon or Norman in date (*CAR* 1, 19).

Outside the UAD study area, two 8th- or 9th-century lead-alloy 'strap end' pieces with animal-head designs have been found near Fingringhoe church, south of Colchester. These may have been model or trial pieces and therefore rare evidence of middle-late Saxon industry from the area (SAU Stray Find 17638–9). Other Saxon finds from Fingringhoe include a 6th- or 7th-century light blue glass bead (Brooks 2001b, 11, 18), a 5th-century supporting arms brooch (SAU Stray Find 17640) and the sceattas mentioned above; these finds point to significant middle Saxon activity in this coastal parish.

Pottery

Anglo-Saxon pottery of the 5th century takes the form of hand-made, sometimes burnished, sandy brick-earth vessels (Fabric 97; *CAR* 7, 21–3), with the only stratified assemblage from Colchester being from Hut 2 at Lion Walk (MON516). Following the pattern of Mucking, West Stow and London, this ware was gradually replaced by vegetable-tempered vessels (Fabric 1; *CAR* 7, 23–6), which became dominant by the 6th or 7th century. The production of vegetable-tempered pottery may have continued as late as the 9th century, although there is no evidence for this from Colchester. A total of a few hundred sherds of vegetable-tempered pottery has been recovered from a number of intramural locations. Three sites in the town have provided useful groups and associations: Hut 3, Culver Street (MON593), the possible late Roman grain-drying oven, also at Culver

Street (MON573) and Hut 1, Lion Walk (MON515).

Both the brick-earth and vegetable-tempered wares which dominate the early and middle Saxon pottery assemblage from Colchester were locally made, although there are also a few middle Saxon vessels originating from elsewhere in England and from France. Three cooking pots and one lamp or small bowl of oolitic-tempered ware (Fabric 12D; *CAR* 7, 37–9) have been recovered from a small number of intramural sites; these are perhaps from *c.* AD 650–850 and of Northamptonshire (Mercian) origin. A single sherd of a wheel-turned ‘bottle’ found in a residual context at the Cups Hotel in the High Street (Fabric 8V) may be an unusual variant of Ipswich ware dated to the period *c.* AD 725–850 (*ibid.*, 27). From further afield are two vessels of Frankish sandy ware (Fabric 97F) also found at Lion Walk (Sites H and A; *ibid.*, 258–1). The first was identified as a globular wheel-thrown jar of possible 7th-century date and came from a pit also containing vegetable-tempered ware. This type of jar tends to occur in Anglo-Saxon cemeteries and is uncommon in domestic contexts. The second Frankish vessel was a straight-sided, or possibly carinated, bowl, tentatively dated to the 8th to 9th centuries, found in topsoil resting on a tessellated pavement (*ibid.*, 261). To this small collection of imported wares can be added the pot found at Old Heath. The vessel is similar to ‘Beerlegem’ pottery of 7th-century date, which is particularly common in the Pas de Calais and the Belgian coast (*CAR* 1, 21–2).

Pottery from the 8th and 9th centuries is very scarce in Colchester, but the presence of a few sherds hints at continued low-level occupation rather than abandonment. In the 8th century, Ipswich, located just 29km to the north, emerged as a significant port and centre of pottery production. It is therefore curious that very little Ipswich ware (*c.* AD 725–850) has been found in Colchester, despite its presence in greater quantities at sites to the west, such as Maldon (*CAR* 7, 26). This has led to speculation that the settlement at Colchester went through an aceramic period or was even deserted for a time in the 8th and 9th centuries. However, a handful of 8th- to 9th-century sherds that point to continued occupation have now been recovered. At the Cups Hotel site on the High Street finds included an Ipswich ware cooking pot (Fabric 8; *CAR* 7, 26) and the wheel-turned ‘bottle’ mentioned above (Fabric 8V; *ibid.*, 27), both perhaps of this period. Recent excavations at 22–24 High Street produced two rim sherds of a transitional Ipswich–Thetford ware vessel, providing the strongest evidence to date for continuity between the middle- and late-Saxon periods in Colchester (Brooks 2004a, 82, fig 23).

The current state of knowledge

by Philip Crummy

Indications of the breakdown of Roman culture and the beginnings of Anglo-Saxon Colchester are ambiguous and difficult to recognise and date precisely. This may be because the relevant deposits are either absent or poorly preserved, but also because there was a degree of overlap between the two which is hard to disentangle. Germans served in the Roman army at all levels; some late Roman artefacts display Germanic influences, and there is the possibility that *foederati* settled in Essex. It is conceivable that some of the earliest Anglo-Saxon material in Colchester might be related to Saxons protecting the town. The distribution of early Anglo-Saxon settlement seems to mirror the Roman pattern, in that the occupation sites lie inside the walled part of the Roman town, and the known cemeteries (at the north end of the Mersea Road and outside Duncan’s Gate) correspond to Roman cemetery areas. There even appears to have been some reuse of Roman structures (for example, the corn-drying oven at Culver Street: *CAR* 6, 109–12), thus raising the

possibility that an element of the Romano-British population survived the transition from Roman to Saxon. The simplest interpretation is that the earliest hut (Hut 2: *CAR* 1, 5–6) was post-Roman and thus dates the start of the post-Roman era in Colchester (*CAR* 1, 22; Esmonde Cleary 1989, 193).

Three Anglo-Saxon huts have been found as a result of examining less than 2 per cent of the intramural town. If this were typical of the town as a whole, then there would have been 100 or 200 huts in total. However, too few huts have been discovered to generalise confidently about their numbers and distribution, and post-built halls have yet to be recognised. Stanley West argued that the huts at West Stow had wooden floors (West 1985, 116–21), whereas Margaret Jones was sceptical that such floors were present, having noted they were absent in sunken-featured buildings at Mucking (Hamerow 1991, 11; Jones 1974, 198). Colchester has produced evidence for both (*CAR* 1, 1–6; *CAR* 6, 118–20).

The extent and purpose of the reuse of Roman structures in the post-Roman period is unclear. St Nicholas's Church, St Helen's Chapel and the keep of Colchester Castle all incorporate Roman foundations (*CAR* 1, 47–8), but proving functional continuity is problematic.

There are so few finds from Colchester attributable to the 8th and 9th centuries that the impression is given that either the town was deserted during much of this period or the size of the population had reached an all-time low. However, the discovery of two large sherds of a pot in transitional Ipswich ware from the High Street (Brooks 2004a, 82, fig 23) suggests that this impression may be illusory and that it is simply a matter of looking in the right place for the evidence.

There are indications that the middle and late Anglo-Saxon settlement was concentrated in the central part of the High Street. St Runwald's church was in the middle, whereas the other High Street churches (St Peter's, St Nicholas's, All Saints' and St James's) were to either end, as if the middle section had been built up by the time they were founded (at a guess, from the 10th century onwards). The 9th-century sherds referred to above were found just south of the central part of the High Street. The moot hall was in the middle, too. Although apparently 11th century in origin (*CAR* 1, 60–7), the moot hall may well have occupied a site which had previously had some similar civic function.

It has been argued that, like nearly all of the rest of Essex, there was little significant Danish settlement in the town and that the Danes referred to in the *Anglo-Saxon Chronicle* were part of the Danish army who used Colchester as a stronghold from which to resist Edward the Elder, as happened later at Lincoln and Leicester (*AS Chron*, AD 942). Ann Williams (1996), on the other hand, paints a picture of an Essex which remained English *except* for Colchester and the north-east, which were settled by East Anglian Vikings. Whatever the truth, it is clear that any material culture of the late 9th and early 10th centuries assumes particular significance as a possible indicator of the status of the Danish presence in the town.

A close examination of the medieval street system, property boundaries and parish boundaries led to the tentative identification of three phases of large-scale town planning (*CAR* 1, 70–4). The third and final phase relates to the building of Colchester Castle and its bailey in the late 11th century, but the first two cannot be dated any more precisely than the 9th or 10th centuries. One of these two phases is presumably attributable to Edward the Elder's reconstruction of the *burh* (as suggested in Biddle and Hill 1971, 84, fig 3), although it is not possible to determine which. Excavations at the Angel Yard site in the 1980s and 1990s have shown that it is possible to test on the ground by taking actual measurements some of the dimensions of tenement plots (both lengths and widths) which, being in round

numbers of poles based on a module four poles long (22 yards), were identified as being part of the three planned phases, and that other dimensions can be found which will help in revealing a planned townscape (*CAR* 1, 50; Shimmin and Carter 1996, 63–4).

The correspondence between the Roman and medieval street systems is so limited that it may be that no Roman streets survived much beyond the end of the Roman period and the medieval street system evolved from a fresh start in which gates were the only features common to both periods. The apparent absence of continuity is lent support by the positions of the medieval frontages on the High Street and North Hill/Head Street. They meander gently and do not seem to relate to the earlier Roman frontages. No post-Roman metalling has yet been identified overlying a Roman street and the limited correspondences which exist between the Roman and medieval street systems can probably all be explained away by the use of Roman gates in the post-Roman town. However, there are problems with this assumption. If the only constraints on the post-Roman street system were the positions of Roman gates, then we need to explain why the medieval High Street followed the line of the earlier Roman street when there was no gate at the west end of it.

Preservation

The period under discussion lasted longer than the Roman town, yet its material remains are slight by comparison. Although the quantity of material is bound to depend to a major extent on the number of people who generated it, the relationship is a complicated one, so that any deductions about the relative population sizes can only be tentative and vague.

There are many reasons for the difference in the volumes of the surviving remains between the Roman and Anglo-Saxon periods. The first, and perhaps the most important, lies in the differences in building practices. Materials (stone, brick, tiles, lime, sand, gravel, clay, clay blocks and timber) were brought into the town in large quantities for new building work throughout the Roman period. The ground level gradually rose by a metre or so as new buildings were erected on imperfectly cleared sites and street surfaces were resurfaced to keep pace with these changes. In sharp contrast, the preference for biodegradable materials in the Anglo-Saxon town made for a much less industrialised building trade and substantially less tangible and enduring remains in the ground.

Another reason is the fact that the Anglo-Saxon and the latest Roman levels are much more susceptible to damage from natural processes and later groundworks than the earlier, more deeply stratified, material. The development of the dark earth proved to be especially destructive of these vulnerable levels. Its cultivation in the medieval period and after resulted in the truncation and loss of some of the deposits, and the roots of plants, shrubs and trees growing in it (cultivated or not) have degraded the levels directly under the dark earth sometimes to the point of near-obscurity. As a result, the latest Roman levels tend to survive only in pockets, such as the 4th-century cellar at the Cups Hotel site (*CAR* 6, 333–4), and the Anglo-Saxon remains consist only of the lowest parts of cut features. The digging of pits and other groundworks in the medieval and later periods also damaged these deposits. The worst-affected areas are building plots, particularly on the High Street, where cellars on the street frontage have penetrated to natural, destroying all the stratified deposits, and pits at the rear of the properties have obliterated much of what was left. This process probably affected the middle Saxon remains more than any other, if, as seems almost certain, the medieval town emerged from a small middle Saxon nucleus focused on the High Street.

A third factor is the rate at which the Anglo-Saxon and Roman populations deposited their debris and artefacts, whether through accidental loss, deliberate burial or discarded

waste. The rates of deposition are themselves multi-factored in their make-up and must depend not only on population size, but on how the two populations disposed of their waste and how much they had in the first place. The rates and volumes of deposition presumably also relate to levels of prosperity as well as to differences in culture and the technology of production, but they are, unfortunately, always likely to be difficult, if not impossible, to compare meaningfully.

The fact that the Roman town left much more in the ground than its Anglo-Saxon successor explains in part why there is so much more Roman than Anglo-Saxon material in the museum collections. As a result of the imbalance, residual finds become more important in the archaeological record if they are Anglo-Saxon, to the extent that residual material in the dark earth might be the sole indication of late Roman or Anglo-Saxon levels which no longer exist. Objects such as thrymsas assume great significance regardless of context, and the distributions of finds, stratified or not, are of considerable value in a way they would not be for the Roman or medieval periods.

Importance

Early Anglo-Saxon settlements in former Roman towns such as Colchester are of importance because they are likely to have been seats of regional power and authority. Colchester is a town where apparently there was continuity of occupation throughout the whole of the Anglo-Saxon period. Although imperfectly understood at present, the early Saxon settlement at Colchester is likely to have been as large as the better-known examples at West Stow or Mucking, and as such would have constituted a significant episode in Colchester's history. Its cemeteries are likely to be of considerable local and regional importance because they will help to set the Saxon settlement in the town in its regional context. The relationship of Colchester's early Saxon settlement to relic Roman features also offers opportunities to study the evolution of an early Saxon settlement to a degree not possible in places such as Mucking and West Stow. The same opportunities apply to the middle and late Saxon periods and to the emergence of Colchester as a small, regionally important town with a street system and parish boundaries which appear to bear little relation to the topography of the earlier Roman town. In the middle and late Saxon periods, Colchester was a defended *burh* of regional importance.

Potential for future research

The first focus of future research should be the Roman and Saxon interface, between c AD 410 and AD 450. Cemeteries which were in use during the first half of the 5th century will be critically important in understanding the transition from Roman to Anglo-Saxon, and so too will any early huts like Hut 2 from Lion Walk, along with their relationships to Roman buildings and the topography of the Roman town. The interface between Roman and Saxon might be illuminated by the recognition of 'events' in the archaeological record which seem to be a product of difficult times in the first part of the 5th century. Two such events can be cited: the burial of the heavily clipped coin hoards near Artillery Folly (*CAR* 4, 71; Burnett 1984, 163–4), and the lead sheet buried and not recovered at the Butt Road church (*CAR* 9, 184–7). Both would appear to belong to the very end of Roman rule. Other 'events' claimed in the past, but no longer seeming credible, relate to the corpse lying on the Berryfield mosaic (probably just an inhumation; Hull 1958, 218) and the late fire (or fires) at Duncan's Gate (Hull 1958, 40–1; but see Crummy 2001, 130–1).

A key area of research for the future will be the degree to which the populations of the late Roman and Anglo-Saxon towns were predominantly of the same stock. Personal names

in Colchester between the late 10th and 12th centuries reveal an overwhelmingly English population despite the arrivals of the Danes and the Normans (*CAR* 1, 25–6), and we must ask to what extent the population in the 5th and 6th centuries could have been Romano-British in origin. The extraction and study of DNA offers a way forward, but only if it can be done on a large scale. Dr Patricia Smith and Dr Ken Yoong at the University of Essex showed that it is possible to extract DNA from Roman inhumations from Colchester (as yet unpublished). They examined bones from the 4th-century cemetery at Butt Road to test some of the family groups that had been tentatively identified on the basis of stratigraphic and other evidence (*CAR* 9, 51–4, 92–3, 156–8). Although the extracted DNA did appear to provide support for some of the postulated family groups, it became apparent that the DNA profile for the whole population needs to be established before any firm conclusions can be made. A DNA profile for the early Anglo-Saxon population is equally desirable because, combined with a similar genetic study for the Roman population, it would open up the possibility of determining to what extent the groups were the same.

A second strand relates to the evolution of the early Anglo-Saxon settlement. This encompasses four key areas of future research: firstly, the size, development and morphology of the early Anglo-Saxon settlement; secondly, the physical relationship of the early Anglo-Saxon settlement and its cemeteries to the surviving remains of the Roman town, and the extent to which the Anglo-Saxon settlement was shaped by them; thirdly, the degree to which the Roman streets survived into the Anglo-Saxon town either as relic features or thoroughfares in use; and, fourthly, the extent to which Roman structures were reused and the continuity of function, if any, between the old and the new.

A third main area of research concerns the evolution of the medieval town and the development of its street system, parish boundaries and property boundaries. There are five themes within this broad heading: firstly, the size and location of occupation in the middle Anglo-Saxon settlement, and the degree to which the settlement can be described as urban; secondly, the relative importance of the central part of the High Street in the middle Anglo-Saxon town; thirdly, the transition from vegetable-tempered pottery to middle Saxon wares; fourthly, the early development of the medieval street system, property boundaries and parishes; and, lastly, the effects, if any, of the Danelaw on the archaeological record.

Sites on High Street, Head Street and North Hill are important for the information that they might contain about the evolution of the street system. Particularly valuable will be any occasions when it is possible to examine site boundaries, especially on frontages, for evidence of Roman influence.

St Runwald's church may be the single most important site when it comes to understanding the evolution of the High Street and Colchester as a medieval town. Of critical importance is understanding how the church came to stand in the middle of the High Street, and how that street came to be as wide as it now is. Was the High Street widened, and, if so, when? Was St Runwald's church built in the middle of the widened street or was the street widened to leave the church in the middle of the market? The earliest St Runwald's church was 8th century, and this might prove to be the date for the emergence of the High Street as the site of its main market and the focal point of Colchester in its post-Roman urban form. Whatever survives of the church must have been badly damaged by the numerous trenches for services which have been dug up and down the High Street over the years, and part of the north side may have been completely destroyed for the construction of a public toilet in the 20th century. Nevertheless, as shown during a watching brief in 1975 (*CAR* 6, 810), parts of the church do still survive, and clearly the site needs to be carefully monitored.

In theory, service trenches ought to provide useful opportunities for dating streets. In practice, this has proved unfruitful, largely because the earliest gravels produce little or no dating evidence, and they are otherwise indistinguishable from much later metalling. Opportunities to excavate sections archaeologically across streets are rare, but obviously are of great potential value. Meanwhile, the easiest indicators of date are unrobbed foundations under medieval streets. The robbing of Roman foundations is nearly always a feature of the late 11th and 12th centuries. Unrobbed foundations inside the walled area of the town are rare (but not so outside). Thus if a town-centre street existed before the mid-11th century, then any Roman foundations underneath are unlikely to be robbed. No example of a robbed foundation has been recorded under a medieval street, whereas several intact ones have been found, such as the Roman theatre in Maidenburgh Street and various foundations recorded by William Wire in Culver Street and elsewhere (Hull 1958, 196–7). The monitoring of service trenches should produce more examples and help to date the development of Colchester's street system.

9 Late Anglo-Saxon Colchester, 917–1066

by *Adrian Gascoyne*

Introduction and historical framework

The first quarter of the 10th century witnessed the creation of a fledgling kingdom of England, with the majority of lands south of the Humber united under the rule of one king, Edward the Elder (AD 899–924/5). Over the next century and a half the kingdom was consolidated, enlarged, lost and regained by a succession of English kings, as they fought to maintain pre-eminence over other British rulers and the Vikings, until Harold II's eventual defeat in 1066. This was a formative period of national kingship which saw a multiplication of English law codes allied with the emergence of a stabilised system of local government, including a complex and efficient tax system, through which the king's will was applied. The 10th century was also an important period of ecclesiastical and monetary reform, with court-driven attempts to revive English monasticism running parallel to the great European reform movement of the time, while royal control over coin production resulted in a single currency of exceptional quality. The strength of the early English monarchy meant that, arguably, its influence and authority reached further than in any other contemporary European country of comparable size (Blair 1984, 88). This was also the period when the manorial system began to develop in the countryside.

Edward the Elder's success against the Viking settlers was underpinned by an extensive programme of fortification across southern England, extending Alfred's strategy of creating defensive centres as a means of securing English gains and enabling the local population to withstand Scandinavian reconquest. A pivotal moment in Edward's ascendancy was his attempt to secure the English frontier in Essex by the removal of the Danish occupants of Colchester and the establishment of a *burh* within the walled town in AD 917. The *Anglo-Saxon Chronicle* records that 'a great [English] tribe gathered together in harvest time from Kent and from Surrey and from Essex and from the nearest strongholds everywhere, and went to Colchester and besieged the stronghold and fought against it until they captured it; and they killed all the people and took all that was inside there, except for the men who fled away over the wall' (*AS Chron*, Abingdon MS). The *Chronicle* goes on to report that, in the same year, 'King Edward went with a West Saxon army to Colchester, and improved the stronghold and restored it where it was broken down earlier' (*AS Chron*, Winchester MS). This action resulted in the capitulation of the East Anglian and Cambridge Danes, marking the successful reconquest of the eastern Danelaw.

In addition to their military roles, many of the English *burhs* were intended as places of permanent settlement and commerce, and Edward's refoundation of Colchester is generally seen as marking the beginning of the post-Roman town. Similar initiatives were responsible for the development of other Edwardian *burhs* such as Bedford and Stamford where, as at Colchester, elements of internal planning have been recognised (Wilson 1976, 137). During a period of systematic urban foundation Colchester was the third or fourth *burh* to be established in Essex, following Witham in AD 912 (Rodwell 1993a, 76–7), Maldon in AD 916 (Dodgson 1991, 170) and possibly Newport in AD 917 (Blackburn *et al* 1993, 125–6).

It is likely that, having recovered north Essex from the Danelaw, Edward the Elder brought the administration of the area into line with the rest of his kingdom. The 10th-century Essex charters indicate that the shire and hundred boundaries, along with the shire

hidation recorded in Little Domesday, were all in place by at least AD 932, and Hart has speculated that Edward restored the East Saxon shire and then formalised its administrative structure with a redrawn cadastre (taxation register), before gifting it to a magnate as the earldom of Essex (Hart 1971; 1987, 62; 1993, 185–200). These boundaries seem to have changed little prior to the Norman Conquest, although the formation of the Colchester Hundred and Maldon half-Hundred have been viewed as late developments that are unlikely to have occurred before the death of the powerful Essex ealdorman Byrhtnoth in AD 991 (Hart 1993, 198). Other East Anglian trading centres – such as Ipswich, which was a half-hundred by c 1070 – appear to have achieved this degree of local autonomy earlier than Colchester, and the town's economic prosperity may have suffered as a result.

The creation of the English *burhs* resulted in new legal arrangements for the minting of coins in each of the kingdom's principal towns, and the laws of Edward the Elder, and later Athelstan, secured the position of the *burh* as a centre of trade (Stenton 1947, 354; Campbell *et al* 1982, 131). Within 15 years of Edward's death, coins were being minted at Maldon, providing a measure of its importance for external trade, while Colchester's exclusion from the list of 35 mints known from the coins of Athelstan indicates the town's relative economic standing at this time (Stenton 1947, 336; Campbell *et al* 1982, 131). Despite the lack of a mint, Colchester was prominent enough to host a meeting of Athelstan's royal council (*witenagemot*) in AD 931 (Sawyer 1968, Cat no. 412). This would have been attended by noblemen and senior clergy from across the land, as well as representatives of local interests (Stenton 1947, 352). King Edmund also held a council at Colchester in AD 940 and it can be inferred that by the end of the 10th century the town was a meeting place for one or more of the judicial institutions of late Anglo-Saxon local government: the borough, hundred and shire courts.

The administrative structure of the English shire served as a framework for royal taxation managed through the king's estates, and the refounded town at Colchester is one of 12 sites in Essex identified through archaeological, place-name and documentary evidence as the location of a royal vill (or manor) (Rippon 1996, 119). These sites range from the high-status settlement at Wicken Bonhunt (Wade 1980) and the *burhs* at Maldon and Witham to the minster church and associated settlement at Waltham Abbey (Huggins and Bascombe 1992). Despite the fragmentation of lay, ecclesiastical and royal estates in the late Anglo-Saxon period, the continued importance of these royal centres is highlighted by the fact that many of them, like Colchester, went on to become hundred centres, while by Domesday most lay landholders held just one manor corresponding in size to the modern rural parish (Boyden 1986, 173; Rippon 1996, 123).

The majority of parish churches were founded during the later 9th–12th centuries, with the division of large minster territories and 'multiple estates' leading to the informal provision by secular lords of churches intended to serve the spiritual needs of the lord, his household and tenants. These estate churches formed the basis for England's parochial system, which was formalised by the legislation of Eadmund and Eadgar. The laws of Eadgar established the payment of tithes as a legal obligation throughout England (Deanesly 1961, 311), an obligation that was enforced through the power of the king's men. By the time of the Norman Conquest the right of a thegn to build a church and endow it with tithes was fully recognised in English law (Stenton 1947, 156). In Essex, as elsewhere, the relationship between parish church and manorial hall has long been noted (Rodwell and Rodwell 1977, 92). Recent work has confirmed the long-held view that late Anglo-Saxon Essex had a preponderance of dispersed settlements, frequently of the church–hall type (for example, Rivenhall: Rodwell and Rodwell 1986, 178–80); although the origins of this

settlement pattern are obscure, it is thought to have developed during the middle to late Saxon period (Wrathmell 1994, 182; Rippon 1996, 125).

By the reign of Æthelred II, Colchester had achieved sufficient economic importance to attract a coin mint, and for a short period it was extremely busy, with several moneys producing a significant percentage of the national output alongside the mint at Maldon (Metcalf 1998, 296; Metcalf and Lean 1993, 210–11). The start of minting at Colchester coincided roughly with the Battle of Maldon in AD 991, and the mint's extraordinary productivity has been variously linked to the payment of a local geld (or tax), the death of the Essex ealdorman Byrhtnoth, and a growth in foreign trade resulting from the sacking of Ipswich by the Viking army in the same year (VCH 1994, *Essex IX*, 26; Metcalf and Lean 1993, 211–22; Metcalf 1998, 220). The return of the Vikings to the English coast marked a renewed period of danger that culminated in the English defeat in 1016 at the Battle of Assandune (Ashdon or Ashingdon) in Essex and the acceptance of the Danish leader Cnut as king of England (Rodwell 1993b, 127–9).

Small-scale minting of coins continued at Colchester and Maldon throughout the 11th century. Other Essex mints may have been briefly active at Horndon (Metcalf and Lean 1993, 223–4) and Newport (Blackburn *et al* 1993, 125–7), but neither of these sites, nor the shire's other 'proto-urban' centre at Witham (Rodwell 1993a, 67–71), appear to have developed into towns until after the Norman Conquest. By 1066 Colchester and Maldon were the only boroughs in Essex, with Colchester the most important of the two. The town had developed significantly since its refoundation, with a sophisticated pattern of burgess tenure and an estimated population of over 2,000 inhabitants (Darby 1957, 254). Despite being eclipsed in terms of trade by London and the main East Anglian boroughs, a steep rise in the annual farm payment following the Conquest may be a sign that Colchester was prospering (Metcalf and Lean 1993, 208).

Past work

Early archaeological interest in the period was generated during the First World War, when Viking-style axes dredged up from the river Colne were purchased by the museum (COLEM:1916.3507; COLEM:1917.3565; COLEM:1917.3566). Also at this time Mortimer Wheeler undertook an investigation of the Balkerne Gate, suggesting that it may have been blocked as part of Edward the Elder's refortification of the town (Wheeler 1921, 183). In the following decade redevelopment of properties along North Hill and the High Street resulted in the discovery of 'Saxo-Norman' pottery, while, during the 1930s, Philip Laver's investigations in and around the castle indicated the presence of a late Saxon chapel that pre-dated the construction of the Norman keep (Drury 1982, 328–31).

Excavations in 1950 on the castle's northern defences proved to be a key archaeological investigation for this period of the town's history, largely because the sequence of pottery that was recovered could be linked to documentary evidence relating to the construction of the Norman castle and its bailey (Cotton 1962). Another important site was excavated in 1955 at St Nicholas's Church in the High Street (Hull 1960), where the pottery assemblage from a pit consisted entirely of Thetford-type ware, a rare occurrence in Essex. Together with pottery recovered from Lion Walk in 1972 (*CAR* 1, 33, 39) and the Cups Hotel site in 1973–4 (*CAR* 6, 333), these finds allowed Philip Crummy to establish an initial typology of 11th- and 12th-century pottery which he published in 1981 (*CAR* 1, 39–40).

Large-scale excavations in Colchester during the 1970s coincided with Biddle and Hill's topographic studies, which were the first to recognise the existence of late Anglo-Saxon town planning in the former Roman town. Biddle and Hill (1971, 84) proposed that post-

Roman Colchester had undergone a single-phase reorganisation of the street system, in common with Winchester and other towns in southern England, and then postulated that this operation had taken place under Edward the Elder, at the time of the town's refoundation in AD 917. Philip Crummy subsequently undertook a detailed examination of Colchester's medieval topography, including a morphological and metrical analysis of the street plan (Crummy 1979b).

Rescue excavations in 1972 confirmed the site of St John's Church, which is recorded as an Anglo-Saxon foundation in an 11th-century manuscript and is an important addition to our knowledge of Colchester's ecclesiastical archaeology (BL Cotton MS Nero D, viii, fols 22–5; Rodwell and Rodwell 1977, 38–9). Warwick and Kirsty Rodwell's 1977 report includes a study of Colchester's ancient churches and considers the origins of all the town's religious foundations using a wide range of evidence (ibid, 24–41). It was followed in 1981 by the publication of *Colchester Archaeological Report 1*, which compiled all the then-known information relating to the Saxon and Norman town. This has since been supplemented by Drury's 1982 examination of the origins and development of the Norman castle (Drury 1982, 302–419), and a popular summary was provided in *City of Victory* (Crummy 2001). Coinage from the Colchester mint has been discussed by Metcalf and Lean (1993, 210–11, 222–3), while the late Anglo-Saxon pottery typology for the town was refined by Cotter (*CAR* 7, 28–34).

The nature of the evidence

The *Anglo-Saxon Chronicle*, Anglo-Saxon charters and Little Domesday are the key surviving documentary sources for late Saxon Colchester. The *Anglo-Saxon Chronicle* refers to events in Colchester in AD 917. The charters, listed by Sawyer (1968) and Hart (1971), include details of historic figures and events, with place-name evidence providing clues to the location of pre-Conquest settlements, natural resources and surviving Roman features. Together with the Domesday returns from Norfolk and Suffolk, those from Essex were recorded in the second volume of the Little Domesday survey, which includes details for 1066. The Domesday entries for Colchester supply environmental, economic, demographic and social data about the town and its hinterland (Morris 1983). Darby (1957) has provided a synthesis of the Domesday data for the eastern counties.

Excavated evidence from the 10th and 11th centuries, including structural features, is sparse, and few pottery assemblages come from securely dated contexts, making the development of a chronology for late Saxon ceramics at Colchester problematic (*CAR* 7, 31). The rest of the archaeological record consists of a handful of often imprecisely dated artefacts which either come from investigations around the town or were recovered as isolated finds. No environmental data has been recovered from late Saxon deposits. The most impressive vestige of this period of Colchester's history is the tower of Holy Trinity Church, which is of 10th- or 11th-century date (Taylor and Taylor 1965, 162–4). Despite the fact that many of the town's standing churches are thought to be Anglo-Saxon foundations, few have the architectural components needed to support such a claim. Topographical detail has been essential in providing insights into this and other aspects of the town's development, such as the street system.

The finds evidence

by Nina Crummy

Without supporting stratigraphic evidence it is difficult to assign material culture to such a tightly dated period. Many items, such as spindlewhorls and hones, are of types made in both the latter end of the previous period and the beginning of the next. Items which may be placed in this period include the heads of two Viking-type axes (*CAR* 1, 19) and two strap ends (*ibid*, 21; N Crummy 2000, 120). Of the small quantity of pottery which may belong to this period (in particular some sherds of Thetford-type ware) (*CAR* 1, 32–40; *CAR* 7, 31–2), a well-stratified group of sherds from the bottom of the town ditch at Vineyard Street was broadly dated to the period 1000 to 1075, although the assemblage may date to late in that range. Limited contact with France is again shown by a few pot sherds (*ibid*, 261).

A particularly important item that may belong to this period is a probable fragment from a heating tray used in the refining of precious metals (*CAR* 5, 87). Unfortunately, there was no associated evidence to assist in the interpretation of this object. Two crucible fragments from the town may belong to this period or the next (*ibid*, 87). Colchester was a mint at this time and, while examples of the coins themselves are almost unknown from the town and there is no positively associated manufacturing debris, the names of 33 moneyers are known (*CAR* 1, 77).

While many towns, such as Thetford, York, Worcester, London, Lincoln and Winchester, have produced considerable numbers of tools associated with spinning and weaving from this period and the previous one, in particular spindlewhorls and pinbeaters, they are rare in Colchester (*CAR* 5, 30). As the textile-manufacturing industry was largely home-based at this period, the dearth of these artefacts, even in residual contexts, is surprising.

The archaeological evidence

Town defences, street system and urban plan

Considering the extensive survival of the Roman town wall (MON570) into later periods, it is likely that the defences were standing sufficiently high above ground to require little more than repairs to the stonework during the refurbishment of the town defences in AD 917. Neither excavations nor structural survey have produced evidence for Edwardian refortification of the wall and it would appear that any such repairs have been obliterated or masked by medieval and later activity. Similarly, there is no evidence to suggest that the Roman town ditch was recut at this time and no new defences appear to have been provided until the 11th century, when a large ditch (MON512) was added to the base of the town wall. This ditch was revealed in Vineyard Street during the Lion Walk excavations, where it was found to be approximately 7.5m wide and 3.0m deep (*CAR* 1, 33, 35). Excavations at other points around the walled circuit have failed to identify this structure, although investigations at Priory Street in 1965 (Holbert 1965, 44–9) revealed a ditch (ELM1256) that may have been part of the same feature. This was dismissed by the excavator as being too shallow to serve a defensive role, but reanalysis by Crummy indicated an original depth of 2.75m (*CAR* 1, 52). The Lion Walk ditch's apparent absence from the rest of the walled circuit suggests that it was only provided along the south side of the town, perhaps because the wall was weakest here (*ibid*, 53). The construction of the ditch was dated to between 1050 and 1075.

Our knowledge of the gateways into the town is also limited, although excavations at Balcerne Lane in the 1970s (*CAR* 3, 93–154) have provided indirect evidence that the blocking wall across Balcerne Gate (MON412) is late Roman rather than the work of

Edward the Elder, as was postulated by Wheeler (Wheeler 1921, 183; *CAR* 3, 121–3). The correspondence between the primary Roman thoroughfares and the medieval street system suggests that, whatever their condition, the other principal Roman gates continued to direct traffic in and out of the town. Thus the apparent survival of Head Street (MON952), North Hill (MON953) and High Street (MON1021) imply the continued use of Head Gate (MON765), North Gate (MON850) and East Gate (MON835). High Street did not continue west of Head Street/North Hill because of the earlier closure of Balcerne Gate, and the only other gate that may have endured was South Gate (MON924), the site of which is linked to the High Street by Queen Street (MON964). Superficially, this road appears to follow the course of a Roman predecessor, but Cooper has suggested that it originated in the medieval period as a path across agricultural land (VCH 1994, *Essex IX*, 42). All other medieval streets in the walled area, with the exception of Eld Lane (MON511) and North Hill (MON953), run across *insulae* of the Roman town and can only have been laid out after the Roman ruins had been removed or covered by the build-up of dark earth (*CAR* 1, 49, fig 42).

Elements of the walled town's medieval street system indicate that, prior to the Norman Conquest, at least one major reorganisation of the town plan was superimposed over the surviving fabric of the Roman city. Evidence for this consists principally of a grid of north–south streets which run at right angles to the primary axis of the High Street (Fig 9.1). The High Street (MON1021) appears to have been used as the baseline for this grid, with Head Street (MON952) and North Hill (MON953) serving as a pre-existing north–south boundary to the west. Added to this T-shaped layout were West Stockwell Street (MON43) and Trinity Street (MON965), Maidenburgh Street (MON957) and Long Wyre Street (MON960), and East Stockwell Street (MON44) and Lion Walk (MON510), although the last two do not line up with each other. So-called ‘pinched-ends’ at the southern ends of East and West Stockwell Streets indicate that the High Street frontage was already built up when these two roads were laid out (*CAR* 1, 50). Stockwell Street (MON958) was presumably laid out to join the northern ends of these two roads together and the curving north end of West Stockwell Street may have developed during this period as an extension, allowing access to the Stockwell Street spring from Northgate Street. Both Church Street (MON954) and Church Walk (MON955) could have developed during this period as routes from Head Street to an Anglo-Saxon predecessor of St Mary at the Walls church.



Fig 9.1 The late Anglo-Saxon town showing distribution of find spots, monuments and significant elements.

Parallel and immediately to the south of the High Street is Culver Street (MON961), which terminates the course of Trinity Street, Lion Walk and Long Wyre Street before they reach the High Street. This may indicate that Culver Street was a later development which resulted in the replanning of the area between it and the High Street, leading to the loss of the northern sections of the aforementioned streets. Culver Street has a 'pinched-end' at its junction with Head Street, indicating that it was added when the Head Street frontage was already developed. The fact that Culver Street was set out prior to the building of the castle's bailey defences c 1076 is illustrated by its eastern end, which fails to curve correspondingly with the curve of the High Street that resulted from the construction of the bailey. Culver Street also appears to pre-date Holy Trinity Church (MON340), which was founded before 1000 (*CAR* 1, 71).

Attempts to date the town's post-Roman streets through excavation have had only limited success. Investigations by Hull, and later Hebditch, of the castle's southern defences revealed that, prior to the construction of the bailey ditch, the line of the High Street had already moved southwards and the street had become hollowed (Drury 1982, 389). Further to the west, a thick layer of gravel metalling (GRP125) recorded on the Castle Methodist Church Site in 1969 has been interpreted as a late Anglo-Saxon predecessor of medieval Maidenburgh Street (*ibid*, 389).

In addition to the post-Roman grid of north-south streets, a number of other primary property divisions and parish boundaries appear to have formed part of the reorganisation of land within the walled town (*CAR* 1, 48-52). Excavations at Angel Yard revealed further elements in the regular layout of the area between West and East Stockwell Streets (Shimmin and Carter 1996, 35-83) and showed that the pattern of medieval tenements developed within this earlier framework (*ibid*, 63-4).

The excavations at Angel Yard also confirmed dimensions previously identified by Crummy, who speculated that an initial redevelopment of the town covered the intramural area west of the line of Maidenburgh and Queen Streets and consisted of a systematic division of the land based on modules of four poles (Crummy 1979b, 149-51; *CAR* 1, 50).

Crummy has also postulated that a second phase of replanning involved the widening of the High Street to form a market place and the formation of Culver Street as an east–west back lane to the rear of properties along a new, southern High Street frontage (ibid, 71). Crummy further argued that St Runwald's church (MON48) was left standing in the middle of the High Street as a result (ibid, 71), and several imprecisely dated north–south masonry foundations observed in service trenches on the north side of the High Street to the east of the church site (Hull 1958, 159, *CAR* 1, 49; *CAR* 6, 810) support this theory (Shimmin and Carter 1996, 63–4). Other scholars happily accept Culver Street as part of a single plan (Biddle and Hill 1971, 84; VCH 1994, *Essex* IX, 38; Rodwell and Rodwell 1977, 40), and some have argued that St Runwald's is a later insertion into the middle of the market (Rodwell and Rodwell 1977, 33–4). Only extensive excavation is likely to resolve the issue.

Either of these episodes of town planning may have formed part of Edward the Elder's restoration of the borough, and Crummy believes that both schemes were so radical that they could only have been imposed by royalty or through a royal agent such as the ealdorman (*CAR* 1, 73). It is not unreasonable to suggest that a royal manor or estate might be expected within the refounded town (Rippon 1996, 118), and Drury has tentatively identified the site of a *villa regalis* within the partially upstanding walls of the Roman temple precinct (Drury 1982, 389–90). Such large urban estates were typical of late Saxon towns, and another pre-Conquest estate, situated in the south-west corner of the town, is known to have been acquired by the Bishop of London between AD 998 and 1066 (VCH 1994, *Essex* IX, 324). It is conceivable that the town plan developed on the basis of a series of such intramural estates, as has been suggested for Winchester, with each block of land owned by an individual lay or ecclesiastical lord (Wilson 1976, 133).

Outside the town walls, possible late Anglo-Saxon developments of the street system have been noted at Lion Walk, Priory Street and Magdalen Street (*CAR* 1, 53). At the Lion Walk site, gravel metalling (MON509) which was observed along the southern edge of the 11th-century ditch outside the town walls was interpreted as a road constructed when the ditch was dug (ibid, 53). A similar feature (ELM1256) was recorded during Holbert's excavation at Priory Street (Holbert 1965) and Crummy postulates that the two surfaces may represent the origins of Vineyard Street and Priory Street, laid out as one scheme of street construction (*CAR* 1, 53). Further from the town walls, a hollow-way (Grub Street) excavated at Magdalen Street may have originated in the 11th century (MON649).

Religious buildings

The Domesday survey mentions only one church at Colchester (St Peter's), but the town may have had as many as nine parish churches and two chapels by the time of the Norman Conquest. The present structure of Holy Trinity church preserves the only convincingly identified pre-Conquest fabric in the town. St Peter's (MON336), situated at the west end of the High Street, was the richest church recorded in the county, although the present structure does not hint at its Anglo-Saxon ancestry (VCH 1994, *Essex* IX, 330). However, its prominent location close to the highest point within the walled town and at the junction of the principal streets of the Roman *colonia*, combined with its Domesday record, suggests that it was an Anglo-Saxon minster (Rodwell and Rodwell 1977, 28; Cooper 2000, 166).

Topographical observation suggests that three of the town's other High Street churches – All Saints (MON327), St Nicholas's (MON334) and St James's (MON329) – were Anglo-Saxon foundations, and Rodwell and Rodwell persuasively argue that much of Colchester's parochial layout developed out of the post-Roman replanning of the intramural

area (Rodwell and Rodwell 1977, 40). All Saints and St Nicholas's, for example, were founded prior to the High Street's southward diversion following the construction of the Norman castle bailey, while the church of St James is located in a prominent position by the town's east gate, on the primary High Street axis.

Although there is no visible Anglo-Saxon fabric in these buildings, the relationship of St Nicholas's and All Saints to former Roman buildings may be further indicators of early foundation dates for these two churches. All Saints appears to share the alignment of a Roman structure nearby (VCH 1994, *Essex* IX, 309) and excavation has shown that St Nicholas's church was built over the surviving walls of a Roman masonry building (Hull 1960, 301; Crummy 1974, 27; Rodwell and Rodwell 1977, 31). Crummy has postulated that the original church of St Nicholas may even have been built using part of a modified Roman building, rather than simply employing its walls as foundations (*CAR* 1, 47). This would make a construction date after the early 12th century most unlikely, as by that time any upstanding Roman ruins would probably have been demolished to provide stone for the Norman keep and other masonry buildings in the town. A square timber-lined pit (GRP124) recorded beneath the chancel and dated to the 10th or early 11th century may have been liturgical (Rodwell and Rodwell 1977, 31).

A second High Street church, St Runwald's (MON48), was located in the centre of the street, with a detached graveyard in West Stockwell Street. A ground-penetrating radar survey of the site in 1999 failed to recognise any buried remains, but an undated north-south wall (ELM19) and human bone recorded in a service trench on the north side of High Street probably mark the east end of the church (CAT report 3/75b). Skulls (ELM675) of unknown date were recovered near the site during a watching brief in 1996 (CAT Report 11/96b). Nineteenth-century photographs and a description and plan by Buckler (1856) have enabled the form of the original church to be established with a degree of certainty. The proportions of the building, its squat design and thick walls, and the potentially early dedication to an 8th-century child saint make an Anglo-Saxon origin likely (Rodwell and Rodwell 1977, 33).

Two explanations have been proposed for St Runwald's unusual position as an island in the middle of the High Street. Crummy believes that its dedication and central location on the primary High Street axis suggest that the church was an early foundation left stranded in the middle of the street when it was widened to accommodate a market (*CAR* 1, 53). Conversely, Rodwell and Rodwell postulated that it was an intrusion on an existing market place with its parish formed out of parts of several adjacent parishes of earlier origin (Rodwell and Rodwell 1977, 33). This theory is supported by the church's detached graveyard in West Stockwell Street, granted to the church in the 14th century (VCH 1994, *Essex* IX, 334), which indicates that the church failed to acquire burial rights until after its foundation, by which time the surrounding area was already built up. This process would suggest a late 9th-century or later origin as a proprietary church.

St Helen's Chapel (MON305) incorporates part of the remains of the town's Roman theatre. The present building has no architectural features earlier than the 13th century (RCHME 1922, 50), but the chapel's north wall sits directly over the theatre's north wall and its east wall follows the original alignment of the post-Roman Maidenburgh Street. The *Colchester Chronicle* records that Eudo Dapifer repaired the chapel in 1076, making an Anglo-Saxon foundation highly likely, and the thickness of the walls (some 0.75m) also suggests a pre-Norman origin (Drury 1982, 387). Written sources indicate that the chapel was always non-parochial, although Rodwell and Rodwell argue that it once formed a separate parish which was later divided between St Martin's and St Nicholas's (Rodwell and

Rodwell 1977, 40).

A chapel which almost certainly failed to achieve parochial status was located during excavations within the Roman temple precinct immediately to the south of the later castle keep, where a Norman chapel was preceded by two late Anglo-Saxon structures (Drury 1982, 328–33). The latest of these (MON824) was interpreted as a single-celled apsidal building built of masonry, which pre-dated the late 11th-century construction of the castle keep and was of sufficient importance for its site to be retained despite its inconvenient proximity to the castle. Drury has dated the masonry chapel to around AD 1000, but a timber-framed structure with walls of plaster infill over wattles (FND237) and a ‘concrete’ floor evidently preceded this (ibid, 330). This earlier building’s use as a chapel is virtually confirmed by the survival of part of an interior wall painting of the Virgin and Child (Rouse 1982, 350–3). The building and associated features are aligned on the late Anglo-Saxon street system and Drury has interpreted the site as part of a royal vill (ibid, 389–90).



Fig 9.2 The tower of Holy Trinity church is the only surviving architectural evidence of late Saxon Colchester (Tony Nichols).

Holy Trinity church (MON340), at the junction of Culver Street and Trinity Street, is the best1 surviving monument from this period (Fig 9.2 and 9.3). It has a fine 11th-century tower built of flint rubble and septaria, with reused Roman brick and tile in place of stone

dressings. The tower is of three stages and has a triangular-headed west doorway built from reused Roman brick, round-headed windows, traces of a round-headed wall arcade and a tower arch also built of reused brick. The tower contains timber floor joists squared to Roman imperial measurements (Hewett 1980, 108), and has been dated architecturally to around AD 1000. It is clearly a later addition to the west end of the nave, which contains parts of an earlier stone structure in its west wall and south-east corner (RCHME 1922, 33; Rodwell and Rodwell 1977, 32). In its original form the Anglo-Saxon church may have been a modest single-celled building (VCH 1994, *Essex* IX, 312), although Rodwell and Rodwell suggest (1977, 32) that it had a square-ended or stilted apsidal chancel.

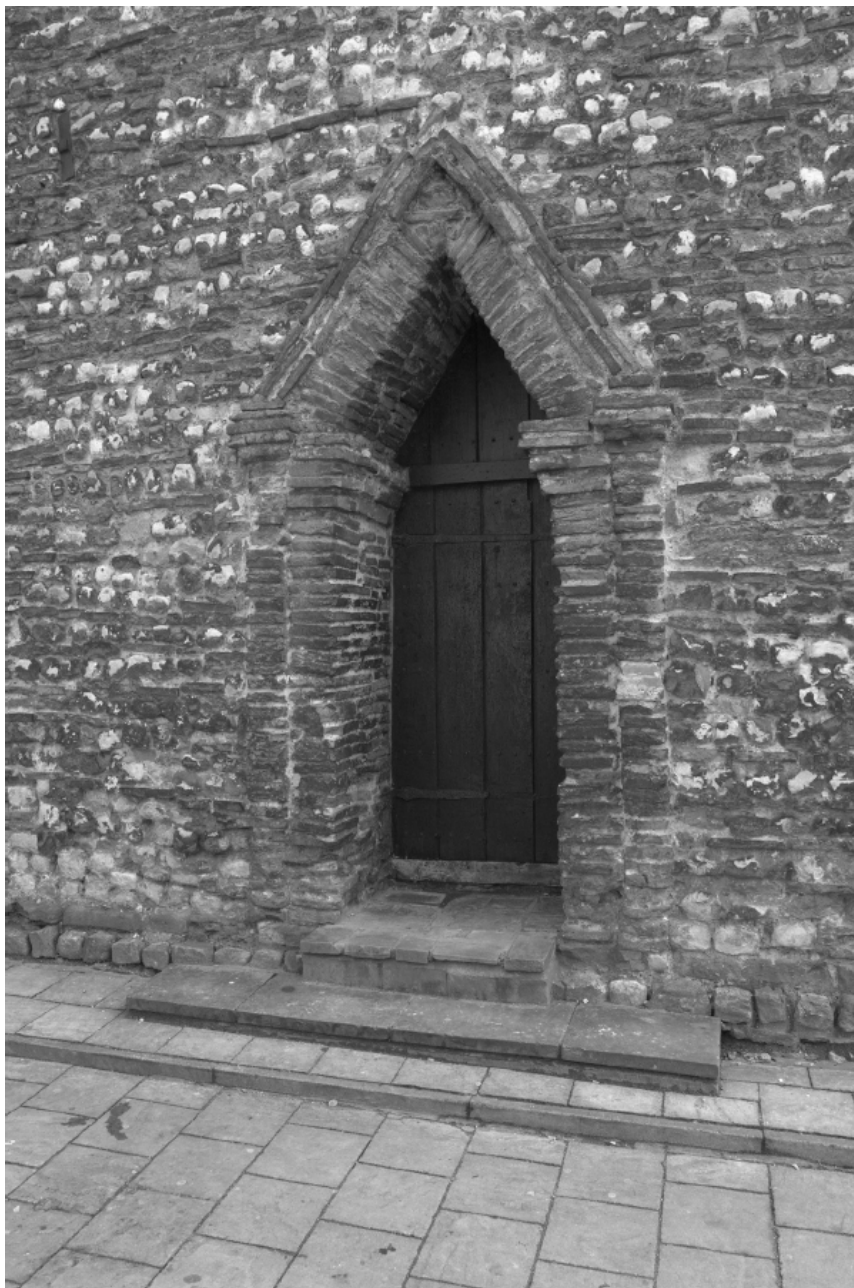


Fig 9.3 The triangular-headed west doorway of Holy Trinity church tower is of characteristic Anglo-Saxon design (Tony Nichols).

The fact that Holy Trinity probably post-dates Culver Street, combined with the evidence that its parish boundary does not extend as far as the High Street, indicates that

the church was potentially a late insertion into the parochial system (*CAR* 1, 52, fig 44). The parish boundary of St Martin's church (MON324), located in the town's Dutch Quarter, also fell short of the High Street, suggesting that its foundation was later than those based along the primary High Street axis. However, the plot of land on which the church is situated was clearly formed by the establishment of East and West Stockwell Streets, and the church has some pre-Conquest features within its fabric (Rodwell and Rodwell 1977, 29–30).

Another possible Anglo-Saxon foundation is St Mary at the Walls (MON338), located in the south-west angle of the town walls, where the presence of an early church was indicated by the discovery in 1962 of inhumation burials (MON339) to the south of the present graveyard. These graves were laid west–east in mortared stone and tile coffin-shaped cists, indicating a pre-Conquest date. If an early church existed on the site it may have begun as a private chapel for the Bishop of London, situated on his estate, which is recorded in this corner of the town (VCH 1994, *Essex IX*, 324).

Two ecclesiastical foundations that imply suburban development during the late Anglo-Saxon period are St John's church (MON345) and St Botolph's church (MON1018). An early church in the grounds of St John's Abbey precinct was discovered during salvage excavations in 1972 (*CAR* 9, 203–18). The walls of this building, which had been largely demolished, had been built of reused Roman building materials, as had the foundations, which consisted of rubble coursed with layers of sand. The structure was three-celled and apparently of two phases, originally consisting of a tower–nave with apse (*ibid*, 213–15); the western compartment appeared to have been butted against the tower at some later date. The church stood over a Roman cemetery with a large Roman grave directly under the central area, leading to some discussion as to whether it had begun life as a reused Roman *martyrium* or mausoleum (Rodwell and Rodwell 1977, 38–9). Historical references record the existence of an Anglo-Saxon wooden church in Colchester belonging to a priest named Siric and dedicated to St John the Evangelist (BL Cotton MS Nero D, viii, fols 22–5), and Crummy has attempted to reconcile the archaeological record with the written evidence (*CAR* 1, 45). However, no traces of an Anglo-Saxon timber structure have been found and the closest parallels to the building's foundations are 12th century in date.

The existence of a church (MON1018) pre-dating the construction of St Botolph's Priory, is implied by the small company of priests that founded the Priory *c.* 1100 (VCH 1994, *Essex IX*, 313). It has been postulated that the Augustinian foundation regularised a pre-existing Anglo-Saxon institution (Peers 1964, 3) and the church's dedication to an early 7th-century East Anglian abbot suggests that it may have been a minster (Rodwell and Rodwell 1977, 34–5). Alternatively, the church could have been a fairly late parochial foundation, driven by suburban growth outside the town's south gate. Similarly positioned churches with the same and other dedications are known from London and elsewhere (Biddle and Hudson 1973, 14–16, 19). No physical evidence of an Anglo-Saxon church has been recovered from the site, although a Roman foundation wall found during excavations beneath the Priory Church in 1991 could represent the remains of an earlier religious structure (Crossan 1992, 103; CAT Report 1/91a). Indeed it has been suggested that it was, like that in the grounds of St John's Abbey precinct, the site of a *martyrium* (Crummy 2001, 150). The building's function remains unknown, however, and the location may be purely coincidental.

Secular buildings

No secular buildings have been examined which can be attributed to this period with any

certainty. Drury tentatively interpreted several masonry sills and 'concrete' floors in an area to the south of the castle keep (GRP123) as belonging to two or more late Saxon buildings associated with a timber chapel. In addition, several shallow slots (GRP30) containing Thetford-type ware and Stamford ware were discovered adjacent to the blocked arches of the Roman temple precinct arcade, suggesting some reuse of the structure (Drury 1982, 341). Further along the High Street, a well (ELM27) which may be as early as the 11th century in date was discovered in East Stockwell Street, while a possible 11th-century building (MON611) was identified during excavations at Culver Street. However, evidence for its function and date was difficult to assess (*CAR* 6, 122), and both structures are likely to have been post-Conquest in origin (*see* chapter 9).

Pottery and metalwork

There is scant physical evidence for settlement within Colchester during the 10th and 11th centuries, and a dearth of excavated features has resulted in a heavy reliance on pottery distributions as indicators of occupation. The main ceramic types belonging to this period have been identified as Thetford-type wares dated to *c.* AD 930–1125, early medieval shelly wares ranging in date from *c.* 1000 to *c.* 1275, and early medieval sandy wares dating from between *c.* 1000 and *c.* 1225 (*CAR* 7, 28–32, 34–57). Imported Thetford-type wares were the dominant pottery in Colchester during the 10th and early 11th centuries, but appear to have been displaced by locally produced early medieval sandy wares during the 11th century, the quantities of which recovered to date suggest a significant increase in the town's population at this time (*CAR* 1, 72). The two types were for some time contemporary, however, and, with the exception of examples from a few of the High Street sites, Thetford-type wares have rarely been found unaccompanied by early medieval sandy wares. Other imports may have included the two most commonly circulated Saxo-Norman wares in south-east England, St Neots ware and Stamford ware, although no examples have been found in contexts securely datable before the 12th century.

The distribution of late Saxon pottery is principally intramural (Fig 9.1), with notable concentrations along the High Street, particularly its central section, and North Hill (*CAR* 7, 31). Off the High Street, assemblages of Thetford-type wares have been excavated from only three safely dated late Saxon contexts, which include pits at St Nicholas's church (GRP124) and the Cups Hotel (GRP13), and from beneath an old turf line sealed under the castle's inner bailey bank (FND279). Of these, only the Thetford-type ware (FND315) from the pit at St Nicholas's church can be confidently dated to the 10th century because of an absence of early medieval sandy ware. Much smaller collections of Thetford-type ware have been recovered from the area between the High Street and the town wall to the south, with a conspicuous cluster recorded in Site J of the Lion Walk excavations (FND337) (*CAR* 7, 6). At present, it is not possible to say whether this pottery emanated from properties fronting the High Street or from other late Saxon properties situated along secondary streets such as Eld Lane, Trinity Street and Culver Street, which may have existed at this time (*CAR* 1, 71). Certainly the Co-op site (nos 7–15) fronting Long Wyre Street has produced a significant amount of Thetford-type wares (FND318), indicating occupation along the street during this period (*CAR* 7, 9, 31). The only significant extramural spread of Thetford-type ware (FND310) is located in the grounds of St John's Abbey, to the south-east of the town, where the late Saxon or Norman church of St John was excavated (*CAR* 7, 31).



Fig 9.4 A silver penny of Æthelred II struck by the moneyer Swetinc during the period AD 991–7. This is one of the earliest coins minted in Colchester (COLEM: 1929.517)

The distribution of other late Anglo-Saxon artefacts from the UAD study area adds little to our knowledge of Colchester at this time and there are few items that can be securely dated to the period. Anglo-Saxon coins are generally scarce and the only coin minted in Colchester and subsequently found in the town is a Crux type of Æthelred II by the moneyer Eadsige *c* AD 991–7 (Turner 1945, 9, pl 1.1). No coins were discovered during the 1970s excavations (Crummy 1987, 68), but a penny of Cnut dating from 1018–24 was recovered from the Angel Yard excavations in the late 1980s (FND339; Shimmin and Carter 1996, 66) and a penny of Edward the Confessor dated 1062–5 was found at Culver Street in the 1980s (FND338; *CAR* 6, 407). A bronze strap end, said to have been found in Colchester, is considered to be 9th or 10th century in date (FND329; *CAR* 1, 21), and an

iron strap end of similar date was recovered from excavations at the Hythe (FND4; N Crummy 2000, 120–1). A doughnut-shaped spindlewhorl found on the same site may also be late Saxon, although the dating of such objects is imprecise (FND330; *ibid*, 120).

Elsewhere, to the west of the walled town, a late 10th- to 11th-century brooch of gilded copper set with a copper cloisonné enamel disc depicting the ‘evil eye’ (FND331) was found along Lexden Road (Buckton 1986, 11–12, fig 3). Lastly, a walrus ivory disc in a copper-alloy base was discovered c 1.5km south-east of the town (FND292). The disc is decorated with clambering beasts and acanthus foliage in the Winchester style and has been dated to c 1000–50. It would have originally been riveted to the cover of a book or a shrine and, while providing a ‘glimpse of lost splendours’ of the Anglo-Saxon church (Campbell *et al* 1982, 197), it is not possible to associate it with any of Colchester’s churches.

Manufacturing and trade

Colchester in the 10th and 11th centuries probably served as a market for the surrounding countryside, although coins were not minted here until the reign of Æthelred II. Before this, traders would not have brought foreign coin to the town to be reminted and Maldon, which had a mint from the reign of Athelstan, was presumably the primary port for foreign trade coming into Essex. The only firm evidence from Colchester for foreign contact during this period consists of a single sherd of 10th- to 11th-century north French glazed ware (*CAR* 7, 261). Fragments of German lava quernstones found in 12th-century contexts may also indicate foreign trade before c 1000 (*CAR* 5, 38). Coastal trade would probably have utilised the postulated landing place at Old Heath, although late Saxon finds from the Hythe have raised the possibility that the area of the medieval port was settled before the 11th century (Brooks 2000, 112).

Minting began in the town in c AD 991 when a London moneyer named Swetinc began striking pennies of the Crux type. Colchester was one of a number of mints, in a broad band of territory from Southwark up to Thetford and Cambridge, where there was a significant increase in production (Fig 9.4). At Colchester this flurry of activity involved 14 moneyers, some of whom were brought in from London, and led to the production of 2.7 per cent of the national output (Metcalf 1998, 220). Metcalf and Lean suggest (1993, 211–15) that this ‘blip’ in production is related to the impact of the battle of Maldon. Thereafter, Colchester usually produced 0.5–1 per cent of the national total, and from c 1000 it was the most important mint in Essex, continuing in production up to the Norman Conquest when it was linked with Maldon for the purposes of the Domesday survey (Metcalf 1998, 220).

No conclusive evidence has been found that might reveal where Colchester’s moneyers operated and there is little evidence for any kind of metalworking in the town. A crucible fragment (FND333) from the Cups Hotel site retained traces of silver, and a second crucible fragment (FND334) containing traces of copper, was found at Lion Walk. Both pieces may belong to the period, although they could equally be post-Conquest in date (*CAR* 5, 87). A rim sherd (FND335) from a shallow heating tray discovered at Butt Road is most probably late Saxon and suggests that metalworking was taking place outside the town walls (*ibid*, 87). A casting pit (MON288) discovered during excavations at the Gilbert School site on North Hill (*CAR* 6, 137–8) and quantities of tap slag discovered in features at the south end of Lion Walk (*CAR* 3, 91) may also date from this period, but are discussed in the next chapter.

No kiln sites have been discovered in the UAD study area despite the pottery evidence indicating that a local early medieval sandy ware industry was initiated at Colchester c 1025–50 (*CAR* 7, 353). Other manufacturing industries, such as weaving, wood-turning,

leather- and bone-working, were probably undertaken on a household or local community scale, but no conclusive evidence for this has been recovered.

The Domesday survey records six mills in the vicinity of Colchester in 1086, of which the approximate locations of at least two can be identified: North Mill (MON914) was situated on the Colne to the north-west of North Bridge, and East Mill (MON916) was located next to East Bridge. Of the other mills, Greenstead Mill (MON1051) may have been originally situated on the Colne before being moved to the site of the later Hull Mill, on a tributary stream, in the 12th century (VCH 1994, *Essex IX*, 259). The mill which belonged to St Peter's church in 1066 may have been the later Stokes Mill (MON913) located on the Colne at the end of Land Lane. The presence of at least six mills along the river and its tributary must have required effective riparian management of the Colne in order to avoid the problems of water shortages and flooding reported in later centuries (*ibid*, 259).

The late Anglo-Saxon countryside

Administrative frameworks

In the mid-10th century Colchester was the centre of an important group of administrative estates held by the ealdormen of Essex (VCH 1994, *Essex IX*, 19). These estates included: West Mersea and Fingringhoe, which commanded the seaward approaches to Colchester, Alresford, Peldon and Bryton (in Stanway). In the immediate countryside around the walled town were the estates of Lexden, Greenstead, Donyland and Stanway. Hart has tentatively suggested that all these properties were taken from the Danes by King Edward the Elder in AD 917 and used for the endowment of the Essex earldom (Hart 1987, 70).

Towards the beginning of the 11th century several of these estates were broken up in the wills of Æthelflaed and Ælflaed, the widows of King Edmund and ealdorman Byrhtnoth and the daughters of the previous ealdorman, Ælfgar. Æthelflaed divided Donyland into four parts and Ælflaed granted Stanway and Lexden to King Æthelred II (VCH 1994, *Essex IX*, 19). Ælflaed also surrendered the estates of Byrton (in Stanway) and Alresford to the king, so that, by the time of Domesday, several of the large estates had fragmented into smaller administrative units. However, at some point following Byrhtnoth's death, this fragmentation was reversed with the formation of the large administrative block of the Colchester Hundred, which was to fall under the jurisdiction of the town's burgesses (Hart 1993, 198) and had been established by 1066.

There is no early record of the bounds of the hundred of Colchester which eventually formed the borough's liberty and was to include the outlying areas of Greenstead, Mile End, Lexden and West Donyland. Cooper has studied the topography of the post-Conquest perambulations of the borough (VCH 1994, *Essex IX*, 230) and Cyril Hart has discussed the hundred's formation, keeping with the long-held view that it was carved out of Lexden Hundred in the late 10th century (VCH 1903, *Essex I*, 406; Tait 1936, 48; Hart 1993). The boundary of the Colchester Hundred was delineated on two sides by elements of the late Iron Age–early Roman dyke system: to the west of the UAD study area the linear bank and ditch earthwork of Gryme's Dyke has survived into modern times as the borough's western boundary and forms much of the eastern boundary of Stanway parish and the western boundary of the parish of Lexden; another dyke, recorded by Morant as 'The Rampers' (Morant 1768, bk I, 96) and located to the north of the study area on the former Boxted and Horksley Heaths (*CAR 11*, 50), formed the borough's northern boundary. Within the parish of Lexden, a flat-topped mound known as Lexden Mount has been proposed as a

possible post-Roman non-sepulchral mound (Adkins and Petchey 1984, 250). It has also been suggested as a possible meeting place for the Lexden Hundred (Christy 1928, 181). Excavation of the earthwork in 1910 failed to identify its function although small quantities of Roman pottery and tile were recovered (Laver and Reader 1913, 190; Hull 1958, 252).

Settlement and religious buildings

Of the 247 Essex settlements recorded at Domesday, 11 that are recorded in 10th-century wills and charters and which can be assumed to have been in existence by c 1000 can be identified in the vicinity of Colchester. These include Greenstead, Lexden, Stanway, Berton (in Stanway), Alresford, Donyland, Fingringhoe, Peldon, Copford and West Mersea. Added to this are several settlements, including Birch, Wivenhoe, Langenhoe and Layer, whose locations and place-names also suggest a 10th-century or earlier origin (Hart 1993, 201–3).

Archaeological evidence for rural settlements of this period is generally lacking and few of the churches in the parishes around Colchester exhibit pre-Conquest features. Excavations at St Mary's church, West Bergholt (EHCR 11741–6, 11748, 11795, 12730), revealed evidence for a late Saxon timber building which had been replaced in the 11th century by a single-celled stone church with an apsidal end. Its position next to Bergholt Hall suggests that it was established as a proprietary church, probably in the 10th or 11th centuries (Turner 1984, 43). St Barnabas's church, Great Tey (EHCR 8699), and All Saints at Inworth (EHCR 8152) both have major structural elements that are accepted as late Anglo-Saxon. In addition, St Peter's at Alresford (EHCR 2384), St Mary's at Little Birch (EHCR 11732, 11733), and St Peter and St Paul at West Mersea (EHCR 2274) all have structural features likely to belong to this period. St Andrew's at Fingringhoe (EHCR 2525), St Albright's at Little Stanway (EHCR 11834, 11835) and St Michael's at Berechurch (EHCR 11749) may also have Anglo-Saxon elements (Rodwell and Rodwell 1977, 94–125). Saxon pottery was reportedly found in the vicinity of St Michael's, Berechurch, when a Second World War POW Camp was built (Gant 1972, 33) and it has been suggested that it originated as a private chapel founded for Berechurch Hall (Rodwell and Rodwell 1977, 97).

Churches are recorded in the Domesday Survey at Peldon, Greenstead and West Mersea, the last being the site of a minster church (St Peter's) known from a series of later 10th-century wills. A fragment of Anglo-Saxon carved stonework with characteristic interlace ornament, thought to be a fragment of architectural detail or coffin lid, is embedded in the church's 14th-century south aisle (Carter 1971, 37). In 1046 a Benedictine priory was founded at West Mersea on a site to the south of the present church (Hart 1980, 94) and several undated burials (EHCR 12546) thought to be associated with the priory have been recovered from the area.

Landscape management and rural resources

The Colchester dykes are the only ancient field boundaries that can be demonstrated to have persisted into the modern era. There is no clear evidence for relict Roman field systems, such as those observed in the south-east of the county (Rippon 1991, 57), or Anglo-Saxon field boundaries within the UAD study area. However, investigation of a Roman double-ditched droveway and enclosure cropmark in Stanway has produced some pottery evidence for continued use into the Anglo-Saxon period (Partridge 1993a, 218). It has been further suggested that Stanway's northern parish boundary may have originally followed strips or furlongs in open fields (VCH 2001, *Essex X*, 266). This process parallels the nature of parish

formation in Colchester, and the other contemporary urban settlements, where parochial units are mapped out in relation to a pre-existing framework of tenurial boundaries.

Our knowledge of Colchester's late Anglo-Saxon agricultural economy, which is entirely based on the Domesday survey, indicates that agricultural land, measured in plough teams, was concentrated to the south of the town. Arable fields, probably once the common fields of the borough, survived throughout the Middle Ages to the south-east and south-west of the town, mainly in the parishes of the intramural churches. The boundaries of the borough field in the parish of St Mary in the Walls suggest that it was set out in the late Anglo-Saxon period (VCH 1994, *Essex IX*, 256).

At the time of the Domesday survey, Essex was a relatively well-wooded county (Darby 1957, fig 61). To the north of Colchester the place-name Cestrewald (from OE *ceaster weald*, meaning 'wood of the walled town') has been used to identify an extensive tract of pre-Conquest woodland over which the people of Colchester held common rights. The woodland appears to have stretched as far south as Mile End, well within the Colchester Hundred and in sight of the walled town from which it took its name (Stephenson 1979a, 111–12). Woodland was exploited during this period for fuel, constructional timber, withies, grazing for pigs and the intercommoning of cattle on woodland pastures (Rackham 1986a, 16, 40). The late Saxon floor joists of Colchester's Holy Trinity church provide a possible indication of the quality of timber or woodland management regimes in the woods around Colchester, having been interpreted as representing either the poor quality of the raw material in general or a poor-quality selection from the available resources (Hewett 1980, 108).

Heaths were also exploited through intercommoning and as a source of pasture and fuel (Rackham 1980, 105). Domesday generally contains scant information about communal grazing and, as a result, heathland is a neglected feature of the pre-Conquest Essex landscape (Hart 1993, 190). Significantly, 240 acres of pasture and scrub were entered for Colchester, and fragments of heathland that survived to be mapped by Chapman and Andre in 1777 probably originated in the Anglo-Saxon period, and can be shown to have once encircled the town (Hart 1993, 191). Grazing on the coastal salt marshes was also a communal right in the Saxon period and by Domesday the marshes were further exploited through the production of salt (Darby 1957, 246–7). No fishery is recorded for Colchester in Domesday, but in recent years aerial photography has revealed several V-shaped timber fish weirs off the Essex coast, including a particularly fine example at East Mersea. Radiocarbon dates from similar structures at Collins Creek, in the Blackwater estuary, have provided a middle–late Saxon date (Buckley 2000, 9).

Communications

Following Edward the Elder's reconquest of Essex, the itinerant nature of late Anglo-Saxon government would have required the maintenance of at least the principal Roman roads in the shire (Hunter 1999, 80); the survival into modern times of the main routes leading to Colchester from London, Norwich and St Albans implies their use throughout the period for national and regional communication. Although the condition of these arterial roads is uncertain, the 11th-century forms of the name Stanway have been taken to signify 'at the stone ways' (Reaney 1935, 394) and Stephenson has postulated that this derives from two or more 'stone ways' – that is, Roman roads that remained serviceable in the Anglo-Saxon period (Stephenson 1979b, 115). These probably included Stane Street (EHCR 8646), still in use as the A120 from St Albans to Colchester, and the road to Cambridge, both of which converged close to Stanway Bridge in the west end of Stanway parish.

The courses of other postulated Roman roads, such as the Easthorpe, Nayland and Mistley roads, survive in sections, indicating that parts of them remained in local use (Rackham 1986b, 257). These were joined to a network of minor roads, lanes and trackways linking villages, hamlets, fields and commons that remains fossilised, in part at least, within the modern landscape. Little work has been done to elucidate these Anglo-Saxon highways, but an important source of information are the late Anglo-Saxon charters. A local example, the Mersea Charter of Edward the Confessor, mentions two river crossings: the causeway to Mersea Island (the Strood), and the point where the Colchester–Mersea Road crosses the Roman River at the modern Manwood Bridge (Hart 1980, 94–5).

The current state of knowledge

by Philip Crummy

The early 10th to mid-11th centuries was a crucial time in the development of the medieval and modern town, yet no structures have been recognised for this period and contemporary artefacts are meagre. The absence of a successful local pottery industry is presumably one reason for the limited numbers of finds. Low population and the limited opportunities for the excavation of key areas within the town may be others.

An approximate indication of the extent of the occupied areas of the late Anglo-Saxon town has been obtained by mapping finds of Thetford-type ware (*CAR* 1, 33, fig 29). The number of find spots is low and the distribution crude and patchy, but the evidence seems to suggest occupation along the High Street and North Hill, with pockets along Culver Street and Lion Walk. Head Street can now be added to the map on the basis of Thetford-type ware sherds from excavations in 2001 at the former Post Office site. The absence of Thetford-type ware in the defensive ditch at Lion Walk (*ibid*, 33–5; *CAR* 7, 311–16) is crucial, as it suggests that the ware had ceased to circulate in the town to any significant degree by *c* 1050–75.

Very few features datable to between AD 900 and 1050 have been identified and much of the Thetford-type ware from the town is residual in later contexts. The only deposits dating to this period are the mid-11th-century defensive ditch sectioned at Lion Walk (*CAR* 1, 33–5; *CAR* 7, 311–16), a pit at the site of St Nicholas's church (Hull 1960, 327–8; *CAR* 1, 39), two pits at the Cups Hotel site (*ibid*, 33–8; *CAR* 7, 311), and a buried land surface under the castle rampart (*CAR* 1, 32–3). Equally significantly, pre-Conquest features, apart from the early Saxon huts, were entirely absent at Lion Walk and Culver Street (*CAR* 6, 123).

The quantity of Thetford-type ware found so far is very modest compared to the quantity of early medieval sandy ware (Fabric 13), which dates from *c* 1000 (*CAR* 7, 39–41). The minting of coins did not start until *c* AD 991 (Metcalfe and Lean 1993, 210), which is later than at Maldon, where a mint was established in AD 925. Nevertheless, Colchester was a significant town in the 10th century. The fact that both Athelstan and Edmund held councils in Colchester suggests that this was so, as does the scale of Athelstan's council in *c* AD 931 and the statement that it took place in 'a town well known to all men' (Kemble 1839). The relatively late start for Colchester and the modest amounts of Thetford-type pottery suggest that the town's population was small until the late 10th century, when it began to rise. The population is not likely to have been that sparse, however, as Holy Trinity church was founded well back from the High Street, hinting at a shortage of building land in the central part of the High Street frontages before *c* 1000–50.

Early churches remain unexcavated apart from St John's, which pre-dated St John's

Abbey (*CAR* 9, 203–18); the presumed minster church at St Botolph's has not been located despite limited investigations of the site. Excavation of the chapel in the castle bailey has provided support for a late Saxon date for the building (Drury 1982, 328). However, the interpretation and dating of the chapel foundation(s) were problematic (*ibid*, 326–7).

Preservation

The preservation of houses and related buildings is very poor. Being close to the frontages of the main streets of the medieval and later town, remains of these structures are often severely damaged during the construction of later buildings and cellars. Their susceptibility to damage is made more acute by the slightness and shallow depth of the remains.

The metallurgy which makes up the main streets of the post-Roman town has been examined in various places, although it has proved difficult to define and date individual sequences of metallurgy. None has as yet been identified as being early and the extent to which the early metallurgy might survive is not clear. It is conceivable that most has been stripped off and replaced during resurfacing work over the last few hundred years or so.

Some of the potentially early churches in or near the town centre have been demolished: notable among these are St Runwald's, St Nicholas's and St John's. Moreover, the foundations and floor levels of the western half of St John's have been completely destroyed and St Runwald's is likely to have been extensively damaged by the digging of services and other more recent excavations in the High Street. On the other hand, the buried remains on the site of St Botolph's Priory appear to be well preserved.

Importance

Colchester was a defended *burh* of regional importance which provides a significant opportunity to study the evolution of a small medieval town in relation to a closely mapped Roman one, taking into account the constraints which the surviving elements of the latter imposed on it. Colchester's archaeological importance as an example of a late Anglo-Saxon town is moderated by the paucity of finds from the period and by the difficulty in identifying contemporary structures. The reasons for the deficiencies in the archaeological record need to be explained and, ironically, these make late Anglo-Saxon Colchester an even more interesting place to study. A minster church preceding St Botolph's Priory, if one existed, and particularly if there was any evidence of a physical relationship with earlier Roman structures, would be of regional and even national importance.

Potential for future research

Despite the poor chances of survival, there is nevertheless the possibility that the remains of houses dating to *c* AD 900–1050 do exist to a useful extent in the town. The investigation of buildings of this period would add substance to the postulated distribution of the late Anglo-Saxon population as indicated by Thetford-type ware and would also provide information about the nature of domestic houses of this period which would be of regional as well as local value.

The excavation of sections across medieval streets might provide dating evidence for the origin of the medieval street system, while the investigation of buildings and other structures of the period *c* AD 900–1050 could produce ceramic sequences for the period as well as useful information about the buildings and structures themselves. Subjects for excavation-based research are churches (especially Holy Trinity, St Runwald's, St Peter's, St Nicholas's, St Martin's and St Mary's), mills (especially North Mill, Middle Mill and East Mill) and wells, if they can be located (especially Stock well, Stane well, King Coel's well

and the well in Colchester Castle).

The need to study the impact of Christianity in the region has been highlighted by Brian Ayers in the Eastern Counties research framework (Ayers 2000, 31). St Botolph's Priory, especially, could prove to be of particular importance if pre-Conquest levels survive, particularly if continuity could be demonstrated between a minster church and the Roman building partly uncovered there during excavations in 1991 (unpublished but *see* Crummy 1992b). The little that was seen of the Roman building suggested that, probably, there was no such relationship, but the site needs to be thoroughly investigated to be certain.

10 Early Medieval Colchester, 1066–1348

by *Adrian Gascoyne*

Introduction and historical framework

Soon after his coronation at Westminster, William I set off upon a military and political advance into East Anglia, a region that was seen as of primary importance because of its exposure to the ongoing threat of Scandinavian invasion. The king's first stop was Barking in Essex, where he received the submissions of various English notables before travelling on to Norwich, receiving further submissions on the way (Brown 1969, 187). Considering its status as the principal town in Essex, and its location *en route* to Norwich, it is perhaps not unreasonable to assume that Colchester was one of the places visited by William. Within a few years, Norman control in Essex was to be epitomised by the erection of a royal castle in the town.

According to the *Colchester Chronicle*, the castle's construction was initiated by the Norman baron Eudo Dapifer on behalf of the king, following an attack on the town by Danish pirates *c* 1071; probably, according to Philip Crummy's reconciliation of the dates, the same Danish fleet that attacked east-coast ports in 1069 (*CAR* 1, 30). England's east coast was threatened again by invasion in 1075 and 1085, and these raids and anticipated attacks from overseas have been proposed as a contributory factor in the decline of coastal holdings in north-east Essex during the period (Finn 1971, 251). No loss of value is apparent for Colchester, however, and by 1086 the town's fee-farm, or annual rent paid to the Crown, had risen to five times the pre-Conquest level. Of the known borough farms, Colchester's was behind only those of London, York, Lincoln and Norwich, something Cooper has taken as a sign that Colchester prospered as a result of the Conquest (VCH 1994, *Essex IX*, 21).

As steward to William I and his son William Rufus, Eudo Dapifer appears to have had custody of the castle and town. From the latter part of the 11th century he transformed Colchester through the foundation of St John's Abbey and the leper hospital of St Mary Magdalen, and other public benefactions. In 1101 Eudo was granted both the town and castle by charter from Henry I and held them in his possession until his death in 1120, when they reverted to the crown. By 1130 the town's farm had been reduced to half the 1086 figure and, on the basis of taxes paid to the king, Colchester was ranked 27th of the provincial towns at the time of Henry I's visit to the castle *c* 1132 (VCH 1994, *Essex IX*, 21). This reduction in farm combined with the ending of coin-minting in the town *c* 1157 may indicate a short-term decline in the town's fortunes around the middle of the 12th century (*ibid*, 26).

In England, as over much of Europe, the 12th and 13th centuries were largely a time of economic expansion, evidenced in Essex (and elsewhere) by the foundation of new markets and towns, such as Braintree and Chelmsford (Hunter 1999, 92–3; Petchey 1980, 116). Like many other boroughs, Colchester received its first royal charter in the latter part of the 12th century, although the wording of the charter and the town's Norman moot hall indicate that the burgesses had been enjoying elements of self-government since the reign of Henry I (Crummy 2001, 152). Another expression of self-determination by the town's burgesses was the establishment by the mid-12th century of a new port to generate income for the borough at the Hythe. The creation of the port gave Colchester direct access to the

flourishing north European markets of the Angevin dominions in France, and of the Low Countries, and as such it was probably the most important economic development in early medieval Colchester. Despite the county's long coastline, the Hythe and the port at Maldon appear to have dominated sea-borne trade in Essex to the extent that only three other ports were founded during this period (Petchey 1980, 117). The Hythe's early commercial success is illustrated by an assessment for subsidy in 1204 that records it as one of England's principal east coast ports. The port's assessment was higher than those of Norwich, Ipswich, Dunwich and Orford, with an overall ranking of 19th or 20th out of the 30 seaports assessed at this time.

By the late 12th century Colchester had attracted a Jewish population large enough to be documented, and, drawing parallels with other towns in England, the prestigious stone houses that were located around the market place have been linked to this community. In 1191 Colchester's Jewish community was perhaps the ninth wealthiest in the country, but the town was never to become a major centre of English Jewry and by 1221 the Jewish community ranked 16th among those paying taxes to the crown. At the time of the Jewish expulsions in 1290 there were only seven Jewish householders in Colchester, most of whom appear to have been relatively poor (Stephenson 1986, 48), although a 'schola' (synagogue) was among the properties confiscated by the king, and the overall value of the seizure placed the community seventh among the English Jewries (Cutts 1889, 125).

During the early 13th century Colchester once again became important as a centre for defence in eastern England when it was drawn into King John's struggle against the rebellious English barons and his wider conflict with the Capetians, which resulted in the invasion of the French prince Louis. In 1215 Colchester Castle was taken by a French army and then besieged and captured by John's forces in 1216. Later in that year a baronial army ravaged the town. It is difficult to gauge the impact of these events on Colchester's inhabitants, however, and local arguments appear to have caused more violence than civil wars and national upheavals in the 13th and 14th centuries. Territorial disputes between burgesses and local landlords were common in towns of this period and at Colchester disagreements between St John's Abbey and the town were a source of intermittent tension. This erupted into violence in 1253, when up to 40 Colchester men were accused of destroying the abbot's property (VCH 1994, *Essex IX*, 22). A series of disputes between the townspeople and the FitzWalters of Lexden dominated the early 14th century, culminating in sieges of the town in 1342 and 1343 (*ibid*, 22).

Under the Norman kings religious life in England was reorganised, enriched and diversified. Although the urban parishes of Colchester would have been left largely in the hands of the native clergy, the establishment of several major religious houses in the town reflects the large number of religious institutions set up in Essex, particularly during the 12th century (Ward 1996, 133). Further houses were established in the first half of the 13th century, when the mendicant friars arrived in the English towns; their popularity and success, as elsewhere in western Europe, was immediate (Platt 1976, 159). In Colchester, as at Chelmsford and Maldon, they chose to build their monastic houses off the main street, indicating that there was still plenty of undeveloped land in the town, although the House of the Crutched Friars probably signals the extent of the town's south-western suburb at this time.

The documented growth of the town's suburbs in the two centuries after the Norman Conquest mirrors a significant increase in the country's population during this period. Colchester's Domesday population has been estimated at over 2,500 individuals, placing it among the middle rank of English boroughs. The town appears to have retained the largest

urban population in Essex throughout this period, despite the fact that population growth during the 13th century in the county's other market towns greatly exceeded that of Colchester (Britnell 1986b, 12). In 1301 the town sustained an estimated population of 3,000 to 4,000 inhabitants, which paled by comparison with the populations of cross-channel centres such as Bruges, Ghent and Ypres. Even by English standards it was not very big, with a population approximately a twentieth of that of London and probably less than a quarter that of Norwich. By 1312 there were at least 518 adult males, excluding paupers, in the liberty, again suggesting a population of between 3,000 and 4,000. This number seems to mark the peak of Colchester's early medieval growth as, like many other towns and much of rural Essex, it appears to have stagnated in the earlier 14th century (VCH 1994, *Essex IX*, 23).

In 1334 the people of Colchester witnessed the demolition of the Justice's house in the castle bailey. By this time Chelmsford was becoming the usual place of administration for the county and this, combined with a reduction in the castle's defensive capacity, suggests that Colchester's military and administrative roles had reduced (ibid, 245). The lay subsidy of the same year shows that, in comparison with other towns in Essex, Colchester was not exceptionally prosperous; it was ranked fourth in the county behind Writtle, Barking and Waltham Holy Cross. Bury St Edmunds and Sudbury, both in Suffolk, also had more taxable wealth (Britnell 1986b, 16) and on a national scale the town ranked about 46th among provincial towns (VCH 1994, *Essex IX*, 23). In comparison with other east coast ports Colchester was just as unimpressive, its taxable wealth being half that of Ipswich, and only a quarter or less than that of Newcastle-upon-Tyne, Boston and Great Yarmouth (Britnell 1986b, 16). All the documentary evidence thus points to a decline in the town's population, wealth and political importance by the time the Black Death arrived in the winter of 1348/9, throwing the town's economic fortunes into further uncertainty. The epidemic continued throughout the summer and possibly into the autumn of 1349 and, like the populations of most other towns, Colchester's townspeople suffered severely. Mortality in rural north-central Essex has been estimated to have been as high as 45 per cent; the evidence from the town suggests that Colchester's may have been slightly lower (VCH 1994, *Essex IX*, 24).

Past work

Unsurprisingly, interest in Colchester Castle was expressed by some of the county's earliest historians and mapmakers, including Camden and Norden, who both suggested a Saxon foundation by Edward the Elder (Round 1882, 17). By the early 18th century, a Norman origin for the keep had been promulgated (ibid, 18), but during the 19th century the building's close associations with Roman remains led to the rather fanciful belief that the keep itself was a Roman structure (Jenkins 1853 and 1869; Buckler 1876). However, by the late 19th century the Colchester historian J H Round had strongly reasserted its Norman origins (Round 1882) and excavations by Wheeler in 1920 proved that the castle keep had in fact been built over the Temple of Claudius (Wheeler 1920). Since Wheeler's discovery, numerous investigations have concentrated on the keep, features within the castle's inner bailey and the bailey defences themselves. The 1950 excavation of the bailey bank by M Alwyn Cotton, to celebrate the anniversary of the formation of the Roman *colonia*, was a significant piece of archaeological work relating to Norman Colchester (*CAR* 1, 32) and the resultant finds of early medieval pottery were published by Dunning (1962). Further excavations of the bailey defences were carried out by Ros Niblett in the 1960s (Drury 1982, 342–7), while investigations of the castle keep have ranged from the Colchester

Archaeological Trust's roof-top excavation of the 'chapel' in 1988 to an examination of the castle well in 1972 by the North East Essex Aqua club. Most recently, the keep has been subjected to a detailed survey by a team from Historic Royal Palaces.

The Norman origins of the town's stone houses were first debated in the 18th century (Morant 1768, bk III, 191–3) after the demolition of a stone building at the junction of Pelham's Lane and the High Street in c 1730. Morant's work on Colchester's antiquities included a description of the Norman moot hall, which was also, shortly after its demolition in 1843, the subject of an article published in the first volume of the *Journal of the British Archaeological Association* (Morant 1768, bk II, 113–14; *J Brit Archaeol Ass* 1 (1843): 143). A second stone house was recorded at the instigation of Dr J H Round prior to its demolition in 1886. Two further stone houses came to light in the 1970s during the large-scale excavations at Lion Walk and a smaller examination of the Cups Hotel Site in 1974. The other major town centre excavations, at Culver Street in 1981 and 1984, provided few significant features dated to the period (*CAR* 6), while the large-scale excavations outside the Roman wall at Balcerne Lane revealed no post-Roman features prior to the 17th or 18th centuries (*CAR* 3). In addition to the suburb outside the town's North Gate at Middleborough, the only medieval suburb to have been subjected to a significant excavation is that which developed around South Gate, where the Osborne Street dig took place in 1988 (Shimmin 1994).

Finds of medieval pottery have been acquired by Colchester Museums since the 1870s and from 1903 until 1977 were described in the annual Museum Reports. In 1973, road-widening and gas-pipe-laying schemes resulted in the discovery of late 12th- to 13th-century and 14th- to 15th-century kiln sites at Mile End and Great Horkesley (Drury and Petchey 1975). In 1981, Philip Crummy published a synthesis of 10th- to 12th-century pottery from the town, based on finds recovered from excavations by the CAT between 1971 and 1977, as well as earlier discoveries (*CAR* 1, 32–40). This was supplemented in 1982 by a report on the medieval pottery from excavations around the castle in which Cunningham defined medieval 'Colchester ware' for the first time (Cunningham 1982). Excavations in the suburb of Middleborough in 1979 led to the discovery of seven or more early medieval pottery kilns and a possible potter's workshop, together described in a 1984 publication by Philip Crummy (*CAR* 3, 186–9). A year later Cunningham produced an outline typology for post-Roman pottery in Essex (Cunningham 1985); the early medieval pottery typology for the town was most recently refined by Cotter in *CAR* 7.

There have been several medium-sized excavations and smaller-scale investigations of the town's religious precincts. During the 1970s this work was concentrated on St John's Abbey (*CAR* 9, 203), but more recently the leper hospital of St Mary Magdalen was examined in two separate excavations (Crossan 1990, 8–11; Crossan 1991, 19–20), and St Botolph's Priory has witnessed limited investigations (CAT Report 1/86b; Crossan 1992, 103). Small-scale excavation has taken place on the site of the House of the Crutched Friars (*CAR* 9, 245–56), but the buildings of Greyfriars remain unstudied. The Hythe has been subjected to two medium-sized modern excavations as well as several evaluations and watching briefs in recent years. Only two significant excavations of medieval churches have taken place: that of St Nicholas's in 1955, which was a rescue excavation that largely ignored the church fabric, and the 1972 examination of the Anglo-Saxon church of St John's (ibid, 213–15). Rodwell and Rodwell published a major work on the town's religious establishments in 1977 and a summary of work on religious sites was published by Crummy in 1993 as *CAR* 9.

In 1979 Crummy published a detailed examination of Colchester's medieval topography

(Crummy 1979b) which he further embellished in his 1981 publication *CAR 1*. Later excavations at Angel Yard in the High Street in 1986 confirmed many of his measurements (Shimmin and Carter 1996). Several of the early documents relating to the town have been published and others have been studied more recently by David Stephenson (*CAR 1*, 28–30; Stephenson 1982, 409–13), while Nina Crummy has undertaken a survey of the origins of personal names of the burgesses in Colchester Domesday and of moneyers operating in the town up to 1087 (*CAR 1*, 75).

The nature of the evidence

The principal sources for the study of early medieval Colchester are documentary records, archaeology, standing remains and isolated stray finds. Historians interested in Colchester's Domesday record are fortunate in that Essex was included in Little Domesday, which gives returns for 1066 in addition to 1086. Unfortunately, Domesday fails to provide details of the industrial and commercial activities in which the town's burgesses were involved and gives few details about agricultural life (Darby 1957, 254). The tremendous proliferation of written records that occurred in England during the 12th and 13th centuries included many references to Colchester that have survived as a largely untapped source of information about the Norman town (*CAR 1*, vii). From the early 14th century these are supplemented by the town's rich and varied archive of municipal records. Colchester court rolls run from 1311 and have been partially translated by I H Jeayes (1921). Two other multi-period municipal compilations are *The Red Paper Book of Colchester* (Gurney Benham 1902) and *The Oath Book or Red Parchment Book of Colchester* (Gurney Benham 1907), which mainly contain information on local government in the town from the reigns of Richard II to Henry VIII, with some earlier information. Other printed works include the *Feet of Fines for Essex* (Kirk 1910; Anon 1928), covering the period from 1182 to 1326, and the Cartulary of St John's Abbey (Moore 1897). The latter is a compilation of annals forming the only extant medieval record of the building and early history of the castle. Colchester is also fortunate in possessing two unusually detailed taxation lists for the years 1295/6 and 1301 (*Rot Parl*; Rickword 1906), in which the name, and frequently the profession and possessions of individual citizens, is given.

Five large-scale, open-area excavations that have taken place in recent decades within the walled town and its suburbs have retrieved information from early medieval deposits (Fig 10.1). In addition, there have been numerous smaller-scale investigations, including modern evaluations and watching briefs, which have included an examination of these levels. The first volume of the impressive *Colchester Archaeological Reports* series concentrated on the archaeology of this period, and summaries of modern investigations are published annually in the *Transactions of the Essex Society for Archaeology and History*. Structures and negative features recorded within the UAD study area include: stone houses and cellars; stone-founded buildings; cess and rubbish pits; churches; burials; cloistral buildings within the religious precincts; industrial features, including metalworking but predominantly lime and pottery kilns; street metallurgy; and robber trenches. Unfortunately, excavation along the modern street frontages has revealed poor preservation of the early medieval remains as a result of later rebuilding and cellarage.

There is little early medieval material recognisable in the fabric of the town's churches and only one secular standing building is known to survive from this period. The castle is, of course, the most impressive example of Norman architecture in the town largely because, with the exception of the ruins of St Botolph's Priory church and the precinct wall of St John's Abbey, the buildings and structures of the town's monastic houses are poorly

represented. However, early medieval burials have been recovered from investigations at St Giles's (*CAR* 9, 230–1), St John's (ibid, 215–18), St Botolph's Priory church (Crossan 1992, 103), the House of the Crutched Friars (*CAR* 9, 248–9) and the leper hospital of St Mary Magdalen (Crossan 1991, 20).

The finds evidence

by Nina Crummy

The pottery type series for the town enables the development of local wares, as well as the range of imports, both from within the eastern region and beyond, to be charted over the period. Contact with the Low Countries and Germany is particularly well-attested (*CAR* 7, 265–7; 276–7). The town's early medieval pottery assemblage is predominantly domestic in nature, however, with only a tiny percentage being derived from foreign imports (*CAR* 7, 355). A few documented dated contexts have been identified, but unfortunately these have produced only very small pottery assemblages. Only one scientifically dated feature has relevance to medieval pottery, and that is an 11th-century bronze-working oven associated with a single cooking pot on the Gilbert School site (ibid, 15). The pottery assemblages from the Angel Yard site, Osborne Street and Hythe Hill have not been studied in detail and represent a useful source of future research material (Crummy and Hind 1994; Cotter 1996; Walker 2000). Similarly, the post-Roman glass from the town remains unexamined.

Two medieval coin hoards deposited in lead canisters were found in adjacent properties at the western end of the High Street and a third, empty, canister came from one of the properties (Grueber 1903, 111–66; Andrew 1905, 32–47; Rickword 1905, 113–22; Thompson 1956, 33–5; Clarke *et al* 1974, 39–61; Archibald and Cook 2001, 67–142; Brooks *et al* 2004, 131–42; *CAR* 4, 70–1). Coins of this period are otherwise rare (for example, *CAR* 4, 68; *CAR* 6, 293; Davies 1996b, 64). Finds from excavations between 1971 and 1985 are published in *CAR* 5, and later finds reports include those for excavations at Osborne Street (Crummy and Hind 1994), 21–31 Long Wyre Street (Crummy 2001) and 79 Hythe Hill (N Crummy 2000). Medieval coins from excavations in the town between 1971 and 1979 are published in *CAR* 4, and Archibald and Cook (2001) have published a detailed examination of the important coin hoards from the town.

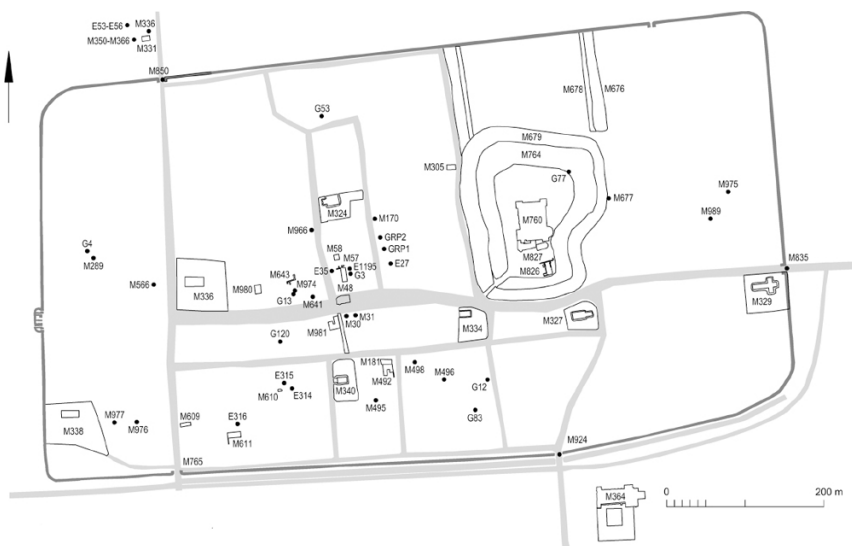


Fig 10.1 The early medieval town showing distribution of monuments and significant elements.

Other recovered artefacts are of types commonly found elsewhere, but are not particularly numerous, though they are representative of many areas of daily life (*CAR 5*; Crummy 1996a, 75–80; N Crummy 2000, 119–22). Of particular interest is a bolster chisel abandoned in a robber trench (*CAR 5*, no. 3124). Trade is represented by two balances, but objects associated with specific crafts are rare. Exceptions are the two crucibles mentioned in the previous chapter, which may belong here, and a small collection of leather-working debris from Osborne Street (Crummy and Hind 1994, 57–9). Numerous pottery kilns lie both within and close to the UAD study area (*CAR 7*, Appendix 2).

Reuse of Roman building materials is particularly important in this period (Ryan 1996, 15–21), but among the contemporary assemblage some late 12th-century limestone waterleaf capitals are particularly distinctive (*CAR 6*, 373–4; *CAR 9*, 235), as are some early (12th- or early 13th-century) glazed roof-tiles from the church of St Mary Magdalen (Crossan 2003, 123). A collection of decorated floor tiles from the town and its suburbs probably mainly belong to the late medieval period (*CAR 9*, 231–4).

Environmental samples have been taken at Middleborough and Culver Street and are dealt with by Murphy and Luff in *CAR 6* and *CAR 12*, while other organic materials are detailed by Crummy and Hind (1994) (see also interim report in *Med Archaeol* 48 (2004, see EH ‘The Preparation of Material for Publication’, References to short notes on page 45]): 229–350). Significant waterlogged structures remain to be found. Environmental sampling has demonstrated the importance of the herring and cod fisheries in this period and the next, with few other species present (*CAR 6*, 279).

The archaeological evidence

The castle

Colchester Castle (MON760) was conceived and built on a grand scale and with a degree of sophistication that, with the exception of London’s White Tower, was to be unequalled during the 11th and 12th centuries (Fig 10.2). In addition to demonstrating the wealth and

power of England's new king, the castle was designed to function as a defended palace, serving both basic military and specialised residential needs. The castle keep was built in at least two main stages and in its initial form consisted of a single-storey stone keep with crenellated parapet wall. During the early 12th century the keep's outer walls were raised by at least one more storey, and a fore-building was added on the south side to protect the main entrance. A barbican replaced this in the 13th century. The castle's earthwork defences consisted of an upper and 'nether' bailey bank and ditch with at least one entrance in the upper bailey's south-west corner. A masonry chapel and domestic buildings stood to the south of the keep. The keep's completed form remains unknown owing to the 17th-century destruction by John Wheeley, whose abortive attempt to demolish the building left its upper level(s) missing and laid the ground for an ongoing debate over the castle's original height.



Fig 10.2 The south front of Colchester Castle said to be the largest Norman keep in existence (Tony Nichols).

Design, siting, preparation and construction of the first-phase keep

The site chosen for William's castle was upon high ground on the western side of the Roman walled town, and was that previously occupied by the Roman Temple of Claudius. No destruction of property to clear space for the castle is recorded in Domesday. At the time of the Conquest, the temple precinct appears to have contained a late Saxon masonry chapel and other buildings which Drury has tentatively identified as part of a royal vill (Drury 1982, 389). The *Colchester Chronicle* states that the Norman keep was built on the foundations of the palace of King Coel and the site's identification by the local populace as a past royal residence, together with its continued high status in the Anglo-Saxon period, are likely to have been determinants in its reuse. Perhaps a more decisive factor influencing the castle's location, however, was the availability of suitable building material in an area with no naturally occurring stone. The fact that the keep was built directly over the temple's podium suggests that the Roman structure and its surrounding masonry ruins represented a ready-laid foundation and immediate source of materials that the Norman builders could

not ignore.

Responsibility for the keep's design has been speculatively linked to Gundulf, Bishop of Rochester, who is believed to have supervised the king's works on the White Tower in London and thought to have started construction there in *c* 1078, after work commenced at Colchester (Renn 1968, 34). The White Tower has unquestionably strong architectural similarities with the keep at Colchester, with both buildings sharing a plan consisting of two major elements: a square and a rectangular block with a semi-circular apse on the south side. Colchester has the larger ground plan of the two, measuring 46.18m by 33.5m, and is the largest keep, in terms of horizontal dimensions, ever to have been built by the Normans. The key factor in determining the keep's size was the decision to reuse the Roman temple podium, and Drury has argued that the castle's ground plan, in particular the apse and south-west tower, was fixed by the podium's late Roman form (1982, 391). The evidence for this remains inconclusive, however, and an early 11th-century predecessor for Colchester and the White Tower has been identified at Ivry-la-Bataille, near Evreux in Normandy (Impey and Parnell 2000, 19). Whoever was responsible for planning the keep at Colchester may have modelled both towers on this earlier structure, although other links with 10th-century fortified palaces in northern France have been proposed (Colvin 1963, 32; Somerset Fry 1990, 15).

The building of the castle has also been associated with Eudo Dapifer, who probably oversaw its construction in his capacity as high steward to William the Conqueror (*CAR* 1, 30). The *Colchester Chronicle* provides the only historical reference to the start of construction work on the keep. It states that, in 1076, 'Eudo Dapifer built the castle of Colchester on the foundation of the palace of Coel, once King...' (quoted in *CAR* 1, 26). Although this date cannot be taken at face value and there is ambiguity over what it actually refers to, Drury concluded that it 'very probably related to the start of the construction of the first phase of the castle' (Drury 1982, 399). Crummy has argued for an earlier start date, suggesting that Eudo was granted the town after an attack by the Danes *c* 1069 with the intention that he should begin work on a castle immediately (Crummy 2001, 145). Although one interpretation of the temporary 'battlements' seen on the outside of the building would suggest that only a single-storied structure was originally intended, Drury has argued against this on architectural grounds and believes that the first keep was a 'temporary expedient forced on its builders either by military or financial crisis' (1982, 393). The threat of Danish invasion during the rebellion in 1075 by Ralph, Earl of Norfolk, and Roger, Earl of Hereford, could be such a crisis, but a later threat by Cnut of Denmark in 1086–7 may also have been the cause.

Prior to the excavation of the keep's foundation trenches, any remaining Roman superstructure was cleared away from the temple podium, leaving a thick demolition layer of mortar rubble on the surrounding ground surface (Drury 1982, 391). According to Drury, excavations by Philip Laver in 1932 and Rex Hull in 1977 within the castle's sub-crypt revealed preparation of the stumps of late Roman walls to receive new walls, together with holes cut to receive the centring for the vault (1982, 311). The same excavators undertook external investigations against the south face of the keep which identified the keep's narrow foundation trenches. These had been dug to a depth of some 3.65m below the bottom of the sloping plinth of the keep: that is, below the original Norman ground level. The lowest 0.75m of the castle's foundations consisted of a mixture of poured stone and mortar. On this base layer the masonry was built up in three stages of increasing quality during which the foundation trenches were back-filled with sand and dark earth. The third and final stage, up to the toe of the plinth's batter, had finely rendered plastered joints and marked the point at

which the foundation trench widened out, to be partially filled with debris that accumulated during the construction of the third stage and the castle plinth (Drury 1982, 315).

The north, east and west sides of the castle's outer walls were butted directly against the temple podium, and on the north, east and west sides the walls projected inwards, over a recess on the podium (Hull 1958, 164). The castle's southern wall was placed behind the edge of the podium, apparently to clear the temple steps and to avoid a late Roman structure which, Drury believes, had been added to the podium's south side (1982, 391; 1984, 31). This also made it easier to incorporate a well within the structure of the keep. The keep walls are built of coursed rubble, including much septaria and tile robbed from the town's Roman buildings, with dressings of ashlar (Barnack, Caen, Quarr and other freestones) and Roman tile. At the base of the walls there is a plain chamfered course of Barnack stone, below which the walls batter outwards into a sloping plinth. The keep has two bays on the north side and three, divided by flat pilaster buttresses, on the east and west sides (RCHME 1922, 51).

In the keep's first phase of construction, its 3.5m-thick outer walls rose for a single storey above the splayed plinth to a height of about 9m and ended at first-floor level in a temporary, crenellated parapet wall approximately 0.6m thick. Soon after the addition of crenellations, the south-west and north-west corner towers were raised one storey above the level of the battlements (Drury 1982, 392) to overlook the sites of the proposed entrances. Comparison with the White Tower and other early keeps suggests that the intended main entrance would have been via a timber staircase to a doorway at first-floor level on the south side. Crummy has speculated that, as a temporary measure, a staircase would have provided access onto the top of the keep's southern curtain wall (Crummy 2001, 147). Hull argued that the north-west tower had provision of this kind for an external timber 'sally-port' staircase leading to the northern curtain-wall (Drury 1982, 321), but believed that the first-phase keep was provided with a ground-storey entrance reached by a timber staircase set on a rubble wall foundation. This foundation, discovered during excavations in 1930–1, abutted the keep's plinth (ibid, 315) and took the stairs to a landing at the base of the 'gateway tower' on the west side of the southern curtain wall where the existing doorway is situated. The landing was built as an integral part of the plinth but is narrower than the existing doorway, which was a later insertion. No trace of an earlier one survives, but Hull speculated that the original doorway would have been smaller and 'probably of plain Romanesque style' (ibid, 322). It has been suggested that the original entrance may have been in the east face of the 'gateway' tower, leading into the south-west tower into which the great staircase was inserted during the keep's second phase (ibid, 396).

From the south-west tower, this original ground-floor entrance would have led into the castle's lobby, which has a 15m-deep well on its east side and a window in its south wall. The main building was divided unequally in two by a north-south cross-wall, with the larger hall, on the west side, further sub-divided by a wall or arcade. This main hall had two round-headed windows in the north wall and three in the west wall, each with deep embrasures. South of the main hall was a room with a plain barrel-vault of rubble and a window in the south wall. A doorway with a round-headed brick arch opened from the main hall into the smaller eastern hall. This, like the west hall, had one window and embrasure in its north wall and three in the end (east) wall. The apse in the south-east corner of the keep contained a barrel-vaulted room with a half-domed apsidal end with window. Across its west end was a cross vault groined into the main vault and with a window at its south end (RCHME 1922, 51; *CAR* 1, fig 67; Drury 1982, 318). The ground floor of the keep was thus poorly lit and appears to have lacked fireplaces, lending support

to the idea that the original intention was to build more than one storey.

Although the north-east and north-west corner towers were solid at ground-floor level Hull has suggested that the latter was raised above the height of the battlements at the end of the construction of the first-phase keep to overlook a 'sally-port' stairway. This turret contained two garderobes and a small chamber with an arrow-slot commanding the position of the external stairway (ibid, 321). The large south-west tower contained at least one barrel-vaulted room with two garderobes and two or three embrasures (ibid, 320).

Outer buildings of the first phase

During the first phase of the castle's construction a late Anglo-Saxon masonry chapel (MON824) was still standing on the site with its apsidal end only 2m from the south-east corner of the keep (see previous chapter). It may have been retained to serve the spiritual needs of the castle builders and, later, its garrison, or was perhaps such a significant religious site that it could not be removed despite detracting from the keep's defensive strength. A second building, located to the south-east of, and aligned with, the chapel, was a domestic stone hall (MON826), measuring 6.1m by 5.8m (20ft by 52ft), which formed the western block of a larger 'double pile' building. Original features included two external doors and, possibly, one internal doorway on the east side. Walls were built of septaria with quoins of reused Roman tile. Dating for the hall is uncertain, but it appears to have been built before or during the early stages of the construction of the keep and Drury has suggested that its awkward position in the corner of the later bailey defences supports a pre-keep date (1982, 396). The buildings probably formed part of the living quarters of the first-phase keep.

Bailey defences of the first phase

Although there is no historical evidence for the construction of the upper bailey, the charter of Henry I granting the castle to Eudo Dapifer distinguishes between '*turris*' and '*castellum*', indicating that, by 1101, bailey defences had been built. These defences consisted of a substantial bank and ditch earthwork, presumably crowned by a timber palisade, which, in their completed form, encircled the keep. The northern and eastern arms of the upper bailey defences survive as landscaped earthworks within Colchester Castle Park and, to the west, a slight rise beneath Ryegate Road suggests surviving remnants of the rampart. South of the castle the earthworks have been totally levelled but have been revealed by excavation. The most complete investigation of the rampart took place to the north-east of the keep: the upper bailey bank was found to have been approximately 28.5m wide and to have stood to a height of at least 4m. It was based on a layer of white chalk or lime, which formed a level surface over the top of the surviving Roman walls and the post-Roman robbing debris. The bank was built up of compact layers of sand and gravel probably derived from its adjacent ditch, which was of an unknown depth and width (Cotton 1962, 57–9).

Excavation has shown that, prior to the construction of the Norman bailey defences, the remains of the Roman structures surrounding the temple precinct stood in places to a considerable height and may have survived as an unbroken enclosure (Hebditch 1971, 124). Although it is conceivable that these upstanding walls served as temporary outer defences during the keep's earliest years (VCH 1994, *Essex* LX, 244), there is no evidence to show that they were modified for this purpose. However, shallow features (GRP30) excavated at 98–99 High Street, which have been interpreted by Drury as late Saxon reuse of the precinct's blind arcade (1982, 341), could belong to the early Norman occupation of the site. Excavations have also revealed that before the earthworks were built the remains around the temple precinct were slighted, although substantial fragments of superstructure were left

intact to be buried beneath the ramparts (Hull 1958, 171–7; Cotton 1962, 57; Hebditch 1971, 121). It has been suggested that these structures were not robbed more thoroughly during the erection of the keep because the keep and earthworks were raised together as part of the same scheme (*CAR* 1, 32).

Both Crummy and Drury have dismissed Cotton's 12th-century date for the construction of the northern bailey bank and Drury has argued that, like the keep, the bailey defences were developed in two main stages, with the area to the north of the keep enclosed first. This is suggested by dating evidence from excavations of the rampart, together with the unusual shape of the earthwork's east side, which turns in to hug the south-east corner of the keep and may indicate a change to an original plan brought about by the threat of invasion (Drury 1982, 398). The pottery recovered from the northern rampart in 1950 all dated to the late 11th century (Dunning 1962, 62), while the material excavated from the ramparts to the south of the keep in 1964 (Niblett 1982, 342–6) and 1969 (Niblett 1982, 346–7) was post-*c* 1100 and may relate to the construction of the second-phase keep.

Construction of the second-phase keep

The terminology of the Henry I charter granting Colchester and its castle to Eudo Dapifer shows that the keep and its bailey defences were in existence by 1101, but cannot be taken as proof that they were completed. This has led Drury to suggest that the second phase of construction of the Norman castle was undertaken by Eudo himself soon after the grant from the king (1982, 399). Crummy has proposed an alternative date of *c* 1076 in keeping with his hypothesis of an earlier start date for the first-phase keep (Crummy 2001, 147), but several architectural elements of the second-phase indicate a date of *c* 1100 (Drury 1982, 399).

During the keep's second phase of construction, the earlier battlements were retained and incorporated into the outer walls, which were then raised to the height of the corner towers to create the keep's first-floor storey. The masonry and mortar of these walls is of a very different character to that of the ground floor, with quoins constructed using mainly Roman tile; the positioning of putlog holes for external scaffolding also differed. The second phase of construction also included the insertion of the present ground-floor doorway, which has been dated stylistically to the end of the 11th century (*CAR* 1, 80), although Drury argues that the bases could be consistent with a date before 1087 (Drury 1982, 398). However, a late 11th-century date is supported by the fact that provision was made for a portcullis when the door was inserted, a feature generally seen as an innovation of Henry I's reign. The great staircase in the south-west tower was also inserted during this second phase of construction and appears to have been integral with the build of the main doorway (Drury 1982, 322).

A secondary entrance was provided in the keep's north wall. This was accessed via a flight of timber steps and was commanded by a narrow loop in the north-west corner turret. A masonry fore-building also appears to have been added at this time to protect the new ground-floor entrance. This structure was examined in 1932 and shown to have rubble walls 1.42m thick comprised mainly of robbed materials laid in courses. The east wall returned against the keep and contained a doorway 1.72m wide with tile-built external jambs. The base of a draw bar slot survived in the south reveal (Drury 1982, 316).

At first-floor level the second-phase keep was generously provided with windows, fireplaces and latrines, and was clearly meant to be the principal residential floor. The large western compartment had two double-flued fireplaces; three pairs of windows with

embrasures in its west wall; four windows and embrasures similar to those on the ground floor, but larger, in its north wall; and two windows in its southern wall. The latter may have belonged to other rooms that have since been removed (*CAR* 1, 80). This compartment was probably utilised as a great hall and was linked to a narrow central apartment by an arcade. A third compartment to the east was accessed via a round-headed doorway set within a partition wall of herringbone brickwork. This compartment was also well lit, with four windows similar to those in the main hall set in its east wall and a single window with embrasure in the north wall. The east wall also contained a garderobe in its thickness, with a small barrel-vaulted lobby adjoining it and nearby, in the main compartment, two double-flued fireplaces of the type in the main hall. The design of these fireplaces is distinctive and also appears in the first floor of the keep at Canterbury, where they are dated *c* 1100 (Renn 1982). The north-east turret contained a barrel-vaulted room with three loop windows (*CAR* 1, 80). In the south-east corner of the keep the 'crypt' had a barrel vault with a half-dome over the main apse and groined cross vaults over the side apses, also with half-domes. The room's original entrance was in the western apse on the north side (RCHME 1922, 51). A circular staircase leading to the floor above was added to the north-west tower.

All that survives of a possible second floor are the bases of the walls from a seemingly continuous mural or intramural gallery. This gallery is best preserved along the southern curtain wall, although the base of a window is still visible on the north-west turret and small rooms are visible above the 'gateway' tower and south-west tower. The walls of the so-called 'chapel' in the south-east angle stand to approximately 1.8m high, and its base was of stone and formed the vaulted roof of the 'crypt' below. A projecting turret on the south side of the 'chapel' apse contains a possible small side chapel with an eastern apse. Excavations in 1988 failed to provide further evidence of the chapel's existence (Crummy 1988c, 1).

Outer buildings of the second phase

Excavations in 1933–34 and 1977 (Drury 1982, 323–33) exposed the remains of a masonry-built chapel (MON827), with a simple apse at the east end, which was constructed to replace the late Saxon chapel that previously stood on the site. The building was 14.9m long and *c* 6.8m wide. The 0.8m-thick walls of its nave were built of septaria, Kentish rag and Roman tile fragments set in a sandy mortar. The walls of the apse were of the same build, but were slightly wider (0.9m thick) and had been constructed on a more massive and irregular foundation. The chapel was built at a higher level than its late Saxon predecessor because of a rise in ground level resulting from the construction of the keep; this was presumably the reason that a new chapel was required. The chapel's foundation level also rose from west to east, suggesting that its construction post-dates that of the adjacent bailey rampart. Drury dates the chapel's construction to the late 11th or early 12th centuries and believes it accompanied the second-phase keep (Drury 1982, 396). The stone hall (MON826) to the south of the keep also underwent alteration at this time, with the addition of a fireplace in its west wall. This was of the same double-flued design as those on the keep's first floor.

Bailey defences of the second phase

Remnants of the southern section of the bailey rampart (MON764) and bailey ditch (MON676) have been recorded during investigations at 5 Maidenburgh Street (Niblett 1982, 342), the Methodist Church Site in Maidenburgh Street (*ibid*, 346), 98–99 High Street (Hebditch 1971, 121) and the Norfolk's House (Hull 1958, 169–70) and Kent Blaxill sites (*ibid*, 171–7) along the High Street. The bailey ditch has also been located in an

excavation and trial trenching at the High Street War Memorial in 1921–2 (Drury 1982, 342) and during observation of service trenching in Castle Park (*CAR* 6, 372). As with the northern section, the Norman builders had constructed the rampart over the ruined remains of the Roman temple precinct, while the ditch was mainly dug into the Roman streets surrounding *Insula* 22, including the former High Street that had continued in use into the late Saxon period. Although no complete section of the bailey ditch has been examined, excavations at 5 Maidenburgh Street revealed that it was approximately 22m wide and augering showed it to be over 5m deep.

Drury has argued that the south side of the upper bailey defences were added to the castle during a second stage of construction, presumably as part of the second-phase keep. This would have completed the circuit of the bailey's bank and ditch earthwork (Drury 1982, 398). The evidence to support this putative second stage comes from the pottery recovered from the ramparts to the south of the keep during excavations in 1964 (Niblett 1982, 342–6) and 1969 (*ibid.*, 346–7). This was post-*c.* 1100 in date and contrasted sharply with material from the 'dark soil' beneath (Drury 1982, 398). The ditch to the south of the keep also appears to have been narrower than that to the north (*ibid.*, 397).

Morant wrote that there were two gates into the castle bailey (Morant 1768, bk I, 7–8). The main entrance into the completed upper bailey appears from Speed's 1610 map of Colchester to have been located in the south-west corner, although a gate was not recorded there until the 1240s (VCH 1994, *Essex* IX, 245) and its earliest form remains unknown.

Later changes to the keep, bailey buildings and defences

Eudo Dapifer held the castle and town until his death in 1120, when they passed to the Crown. There are documentary references to the castle throughout the 12th, 13th and 14th centuries, which mostly relate to its constables, arrangements for its garrison or works to the castle buildings and defences. Although it is difficult to relate these recorded works to the castle's structures some attempts have been made to link them together (Brown and Colvin 1963, 615–16; VCH 1994, *Essex* IX, 241–5; Drury 1982, 403–4).

Reference to the formation of a new bailey shortly before the rebellion of 1173–4 may relate to a stone wall that is known to have enclosed the west and south sides of the upper bailey until its removal in the 17th century (Morant 1768, bk I, 8; Round 1889, 146). The wall was certainly in place by 1182–3, when money was spent on its repair (VCH 1994, *Essex* IX, 244) but no physical trace of it has been found, indicating that it was set on top of the ramparts. Alternatively, the reference to a new bailey could correspond to the construction of the 'nether' bailey (Drury 1982, 398), which was located between the northern defences of the upper bailey and the town wall to the north. The southern end of the 'nether' bailey's eastern arm survives as a landscaped ditch between the putting green and the Park Café in Castle Park, and the western arm is marked by the course of Ryegate Road. The buried remains of the 'nether' bailey's eastern bank and ditch were located during observation of a sewer pipe trench in Castle Park in 1983 (*CAR* 6, 376). The shallow ditch (MON676), which was located at two points 65m apart, was found to be approximately 1m deep and 10m wide. A denuded sand and gravel bank (MON678) measuring approximately 5.5m wide and 0.6m high was recorded to the west of the ditch. The 'nether' bailey's western ditch may have been located in 1977 during a geotechnical investigation at 28 Maidenburgh Street, and its bank appears to survive as a rise within the south-west corner of Upper Castle Park. Thirteenth-century references to a palisade were probably in connection with the 'nether' bailey, implying that its banks were crowned with a timber fence (VCH 1994, *Essex* IX, 245).

Records show that substantial sums of money were spent on the repair of the castle in the late 12th and early 13th centuries. Some of this expenditure may relate to the visits of King John, recorded in 1203, 1205 and 1209, and could have included work on the bailey buildings, which excavations in 1931–2 showed were remodelled during the early 13th century (Drury 1982, 337). This remodelling the alteration of the eastern end of the bailey chapel from an apse to a straight wall at right angles to the north and south walls of the building (*ibid*, fig 2). The rooms to the east of the stone hall were also demolished around this time and were replaced by new buildings set into the tail of the bailey rampart to the west and north-east (*ibid*, 337, 401).

An alternative reason for these works may have been damage sustained by the castle buildings during fighting recorded in 1215 and 1216. In 1214–15 efforts were made during the civil war to strengthen the castle, but a French force captured it in 1215. Carvings of soldiers and a fleur-de-lis in the east court of the castle may have been executed by French soldiers who garrisoned the castle in support of the barons against King John (Stephenson 1978, 44). The castle was recovered in 1216 after a short siege which led to much devastation (Round 1882, 41). Repairs undertaken in 1218 and 1219 were presumably carried out as a result of damage sustained during this conflict (VCH 1994, *Essex IX*, 245). Further works were carried out between 1223 and 1225 and then from 1227 to 1229 (Drury 1982, 403).

During the 13th century, the main entrance to the keep was strengthened by the addition of a masonry barbican (MON825), which incorporated the earlier fore-building. This may have been constructed as part of King John's response to the civil war (VCH 1994, *Essex IX*, 245) but Drury favours a mid-late 13th-century date (Drury 1982, 403), and a record of the expenditure of 100 marks on the keep in 1253 may indicate its construction (VCH 1994, *Essex IX*, 245). The structure abuts the keep and its south wall was clearly laid out to respect the approach to the chapel's west door. Its south-east angle clasps the north-west corner of the Norman stone chapel and contained a feature which may have been a cupboard or some means of communicating between the two buildings, while its west wall is 1.5m thick and contains a small rectangular chamber at its north end in which are the remains of an intramural stair. To the south of this chamber are three loopholes. The main door lay in the south wall and was flanked by two solid D-shaped towers. East of the door there were originally seven loopholes and in the east wall was a loophole and doorway. The barbican was divided internally into two compartments by a wall 1.6m thick with a doorway at its north end. Its walls were built of uniformly small stones and mortar, and included some reused Roman tile and large glazed medieval roof tiles in bonding courses. Quoins were of greensand, septaria and tile (Drury and Hull 1982, 316–17).

The main gate (MON820) in the south-west corner of the upper bailey is depicted on Speed's map of 1610 as a twin-towered barbican and is known as the 'Dunbarr gate' from an 18th-century manuscript (Drury 1982, 403). The gate was presumably built at the same time as the bailey wall, and records exist for repairs to the gate in 1256 and 1300 (VCH 1994, *Essex IX*, 245). Excavations in Museum Street in 1986 revealed massive masonry foundations built of reused septaria and Roman tile set in a yellowish mortar (CAT Report 6/86a). A large foundation (ELM941) at the southern end of the street on the projected line of the bailey ditch was thought to be associated with a passage, perhaps incorporating a bridge abutment, which crossed the bailey ditch. Another large piece of masonry (ELM942) located outside 5 Museum Street, adjacent to the location of the 'Dunbarr Gate', had a number of well-defined faces, suggesting the edge of a building, perhaps the jamb of a gate or door.

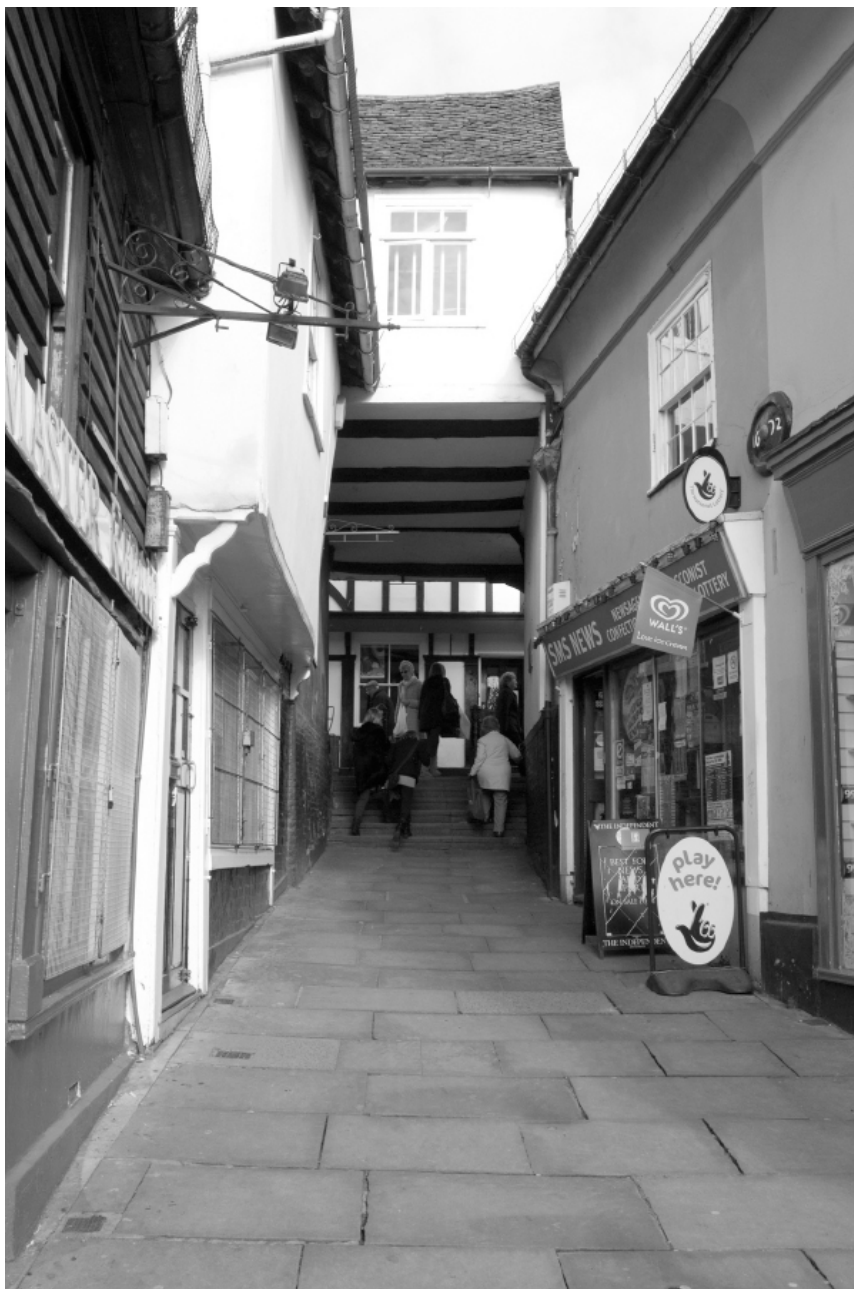


Fig 10.3 Although the present Scheregate only dates to the 17th century, it retains the feel of a medieval gateway, the only point on the circuit of the town wall where this is possible (Tony Nichols).

Evidence for the continued maintenance of the castle defences was provided by excavations at 5 Maidenburgh Street which showed that the upper bailey ditch had been

recut in the early 14th century (Niblett 1982, 342–6). Further work may also have been carried out on the bailey buildings at this time, with a third phase of construction characterised by several poorly built rubble walls, the insertion of a door and the blocking of the 12th-century fireplace (Drury 1982, 337–8). The hall may have been destroyed in 1334 when ‘the house in Colchester Castle, where the justices used to sit for their deliberations’ was demolished by the constable (*Cal Inq Misc* ii, 346–7). In the same year the constable removed the keep’s portcullis and possibly other parts of its entrance (VCH 1994, *Essex IX*, 245), suggesting that by the 14th century the castle’s military role had diminished.

Town defences

The castle at Colchester is a conspicuous exception to the generally held rule that Norman castles implanted into existing towns were located against the town’s perimeter defences, with access to the open countryside (Pounds 1990, 207). However, from the 12th or 13th century the castle’s ‘nether’ bailey would have extended as far as the Roman town walls (MON570) and presumably utilised a section of them as the northern arm of its defences. The Roman walls were clearly deemed sufficient for the defensive needs of the rest of the town and during the early medieval period they were maintained on the original lines. Our knowledge of what happened to them is limited, however, and comes mainly from historical records. Major repairs were carried out in 1173–4 at the time of the rebellion of Henry the Younger, the eldest son of Henry II. No further work appears to have been undertaken during the 13th century, but the court rolls of the early 14th century record charges made on the whole community for repairs to the walls and gates. By the middle of the 14th century houses had been built against the walls, which were also being robbed for building material, suggesting that they were no longer held in high regard and that the military significance of the town defences, as of the castle, had declined (VCH 1994, *Essex IX*, 248). Archaeological investigations of the walls have so far failed to identify repairs that can be dated to this period, but excavations in Vineyard Street and Priory Street did reveal an 11th-century (c. 1050–75) defensive ditch (MON512; ELM1256) along the southern section (Holbert 1965, 44–9; *CAR* 1, 53). This may have been dug in response to the same threats of invasion that led to the temporary embattlement of the first-phase keep, although a pre-Conquest date is favoured by the excavator (Crummy 2001, 140).

During the Middle Ages there were four main gates into the walled town, but we know little about their early medieval forms. The principal entrance was Head Gate (MON765), situated in the south wall near the south-west corner of the town and first recorded as ‘Havedgate’ in 1207. South Gate (MON924) was also located in the south wall and was in existence by 1197 (VCH 1994, *Essex IX*, 248). East Gate (MON835), recorded as ‘Estgate’ in 1311 (Reaney 1935, 369), was located in the east wall, and North Gate (MON850), first recorded during the 13th century, was in the north wall. There were also two or three pedestrian gates providing convenient access to the suburbs. The gate at St Mary’s Steps (MON570) in the west wall was of medieval origin, but had been formed from a Roman masonry drain. Excavations in 1972 failed to date it to earlier than the 15th century. Scheregate (Fig 10.3; MON926), in the south wall, led out to the southern suburbs and St John’s Abbey, and Ryegate (MON927), in the north wall, gave access to the river bank and Middle Mill. These two gates may also have originated as Roman drains, but the site of the latter has not been located archaeologically (*CAR* 6, 324–8).

Head Gate, North Gate, East Gate and, perhaps, South Gate were Roman in origin, and no trace of medieval work has been found during examination of the Roman remains of the first three. Speed’s 1610 map of Colchester shows that North Gate, Head Gate and

South Gate each comprised a single large arched or square-headed gateway, suggesting that they had been rebuilt at some point during the Middle Ages (VCH 1994, *Essex IX*, 250). Speed's map also shows Head Gate to the north of the Roman wall, and an early Tudor cellar revealed during construction of a drain on Head Street in 1913 may indicate that the medieval gate was indeed located to the north of its Roman predecessor (Jarmin 1915, 107). In 2008 a very limited investigation in Queen Street revealed evidence for the South Gate which indicated that it had been extensively remodelled in the medieval period (Crummy 2008c, 34).

Streets

At the time of the Norman Conquest, the intramural street network that was fed by the town's main gates was made up of a combination of fossilised Roman thoroughfares and the results of late Anglo-Saxon town planning. The next significant alteration to the street system came with the construction of the castle and, in particular, the upper bailey defences, which could not fit comfortably between the keep and the High Street. This necessitated the diversion of the High Street in a gentle curve to the south of the castle and the deflection of the southern end of Maidenburgh Street to the west (Drury 1982, 389).

The streets of the town have been studied by Nina Crummy (*CAR* 1, 79) and Pamela Studd (VCH 1994, *Essex IX*, 372–4). Eighteen streets have a documentary reference earlier than 1350 (*see* table 4). In a few instances the fabric of the streets themselves has been dated and, in some parts of the walled town, excavation has given clues to the evolution of the street system by revealing the development of post-Conquest occupation along the street frontages. For example, Lion Walk (MON510) was first recorded c 1320 and Culver Street (MON961) in 1334, but the location of the stone house on the corner of Culver Street and Lion Walk demonstrates the existence of both streets by the 12th century. The earliest metallurgy on Lion Walk sealed post-Roman topsoil and an absence of peg tile in the street's surface was consistent with a date prior to the 13th century. Pelham's Lane (MON41) was first recorded in 1345 as 'Whitefotes Lane', but the stone house on Pelham's Lane has been tentatively dated to the 12th century, indicating the thoroughfare's earlier existence. Cess pits of the 11th to the 14th century excavated at the Co-op site in Long Wyre Street (MON960), recorded as Wirstrate in 1277, presumably relate to buildings along its western street frontage (*CAR* 9, 9).

Outside the town walls relatively few of the roads have records from this period (*see* Table 4), but the Colchester Cartulary of St John's Abbey provides an early example of the deliberate creation of a road. In 1272 the Cartulary records that: 'The Abbott and Convent shall, at their own expense, cause a hedge to be planted lengthwise from the first gate (on 'Magdeleyn lane') up to the second, so that the place may become a lane (*venella*) between the two gates ... taking branches from the trees growing in the said hedge to maintain the hedge' (Rackham 1986b, 264). In the suburbs, as in the walled town, mapping the development of settlement through excavation has provided clues to the early existence of streets. For example, at Osborne Street, outside the town's South Gate, excavations revealed well-preserved remains which were presumably associated with properties on the western frontage of St Botolph's Street (Shimmin 1994, 46). St Botolph's Street (MON970) and Queen Street (MON1024), its continuation within the town walls, were first recorded as South Street in 1339 (VCH 1994, *Essex IX*, 373). Further from the town walls, a hollow-way (Grub Street) excavated at Magdalen Street has been dated to between the 11th and 15th centuries (MON649). The town's northern suburb, Middleborough (MON1023), was first recorded in 1352 (*ibid*, 373) and excavations have revealed 14th-century buildings

fronting onto the western side of the road (*CAR* 3, 189–209).



Fig 10.4 St John's Abbey church from the south; a late 15th-century view, as shown in Morant's 'History of Colchester' of 1748, appears to show a Norman building with later Gothic additions.

Monasteries and churches

Although Domesday reveals little about the extent of church provision in Colchester during the 11th century (Darby 1957, 254), as many as 12 places of worship may have been located within or near to the town walls by the time of the Conquest. Following the Conquest, this pattern of churches and private chapels was quickly transformed by a spate of late 11th- and 12th-century foundations, including several large institutions established by the monastic orders and developed under the patronage of wealthy benefactors such as Eudo Dapifer. In addition to changing the religious map of Colchester, these new stone buildings significantly altered the physical appearance of the town, attracting lay settlement into their immediate vicinity and fuelling the growth of the town's suburbs.

Probably the earliest, and certainly the most significant, of the Norman foundations was St John's Abbey (MON367), established in 1095–6 under the benefaction of Eudo Dapifer (Fig 10.4). The Benedictine abbey occupied a site to the south of the town on the north-facing slope of a small valley and was one of two monasteries which were to dominate this side of medieval Colchester. Speed's map of 1610 depicts a number of the monastic buildings, but little is known of them as they were mostly destroyed during the Civil War siege of 1648. Drawings of the pre-Dissolution monastic church exist, but show nothing of the cloistral buildings. The early years of the abbey are chronicled in four key historic texts that have been discussed by Stephenson (*CAR* 1, 28–30). Although much of the content of these documents is of questionable value, Crummy has attempted to reconcile the archaeological evidence with written sources (*ibid*, 45–6).

Prior to the abbey's foundation the site was reportedly occupied by the house and church of a priest called Siric, which stood on the northern slope of a small hill, was built of timber

and dedicated to St John the Evangelist (BL Cotton MS Nero D, viii, fols 22–5; translated in Astley 1903, 131). Excavations in 1972 within the abbey precinct revealed the rubble foundations of a three-celled church (*CAR* 9, 213–15), which Crummy took to be the church of Siric (MON345). Dating evidence suggested that this building had been demolished during the 11th century, presumably on the foundation of the abbey. The destruction debris of the church was covered with a large dump of soil which was cut by 15 lined and 18 unlined early medieval graves. All were orientated with heads to the west and the graves appeared to have been laid out in rows. The dead comprised a mixture of men, women and children and so must have belonged to a lay burial ground (MON375), which was probably in use between the demolition of St John's Church (c 1095) and the 12th-century foundation of St Giles's Church, when the latter's graveyard took over (*ibid*, 218). Although a short length of north–south ditch (ELM59) discovered to the west of the church may represent an early medieval boundary, it was found to post-date the burials (*ibid*, 217–18) and the extent of the cemetery is unknown.

Crummy has attributed the dump of soil which overlaid the demolished church to the reported removal of a small hill that stood next to the abbey church, the site of which was then utilised as a cemetery (Astley 1903, 133). Excavations in 1973 revealed that the dump also covered the remains of a burnt wall of sun-dried sandy clay bricks (ELM60) which Crummy has equated with monastic buildings on the north side of the church that were burnt during a fire in 1133 (*CAR* 9, 221). This fire is reported to have destroyed the monastery and a large part of the town only 18 years after the first abbey church was dedicated. It resulted in the rebuilding of the abbey church and the transfer of some of the monastic buildings from the north to the south side (Bodl. MS, Gough, Essex, 1; Rickword 1923, 124).

A 15th-century drawing of the church shows that it was rebuilt on a cruciform plan with a large central tower and a west front flanked by south-west and north-west towers (Fig 10.4). The church is shown with a 14th- or 15th-century chapel on the south side of the nave, suggesting that, after the 1133 fire, the cloister remained on the church's north side (Astley 1903, fig 2; VCH 1994, *Essex IX*, 303). The chapterhouse also appears to have stayed on the north side, as Eudo's body allegedly lay undisturbed in it from 1120 to 1320. Building was still in progress in 1235 and the chancel may have been further modified in the 14th century, for the presbytery was apparently new when the body of Eudo Dapifer was transferred there in 1320 (*ibid*, 303). The location of the monks' cemetery (MON378) is uncertain, although skeletons have been recorded from two other locations within the precinct, including the former 'pinnacle garden' (Wire nd, 26/01/1843) and an area close to the Officers Club squash courts (CAT Report 11/86a). The 1986 watching brief for the squash courts' extension also led to the discovery of a section of gravel wall foundation 4.6m wide with intact walling on its north side (ELM797). A 19th-century map by Cutts shows the location of wall foundations to the south of the abbey gate in the 'pinnacle garden' (Cutts 1889, folio facing 34) which Hull considered to be part of the abbey (Hull 1958, 295). More recently, trial trenching in 2007 in advance of the redevelopment of the Flagstaff House compound, revealed a substantial medieval wall foundation some 7.7m long. This was right-angled and possibly representing the south-west corner of a monastic building with an internal clay floor (Brooks *et al* 2008, 13). Another structure was a lime kiln/pit probably contemporary with the rebuilding of the abbey after the major fire of AD 1133 (*ibid*, 12).

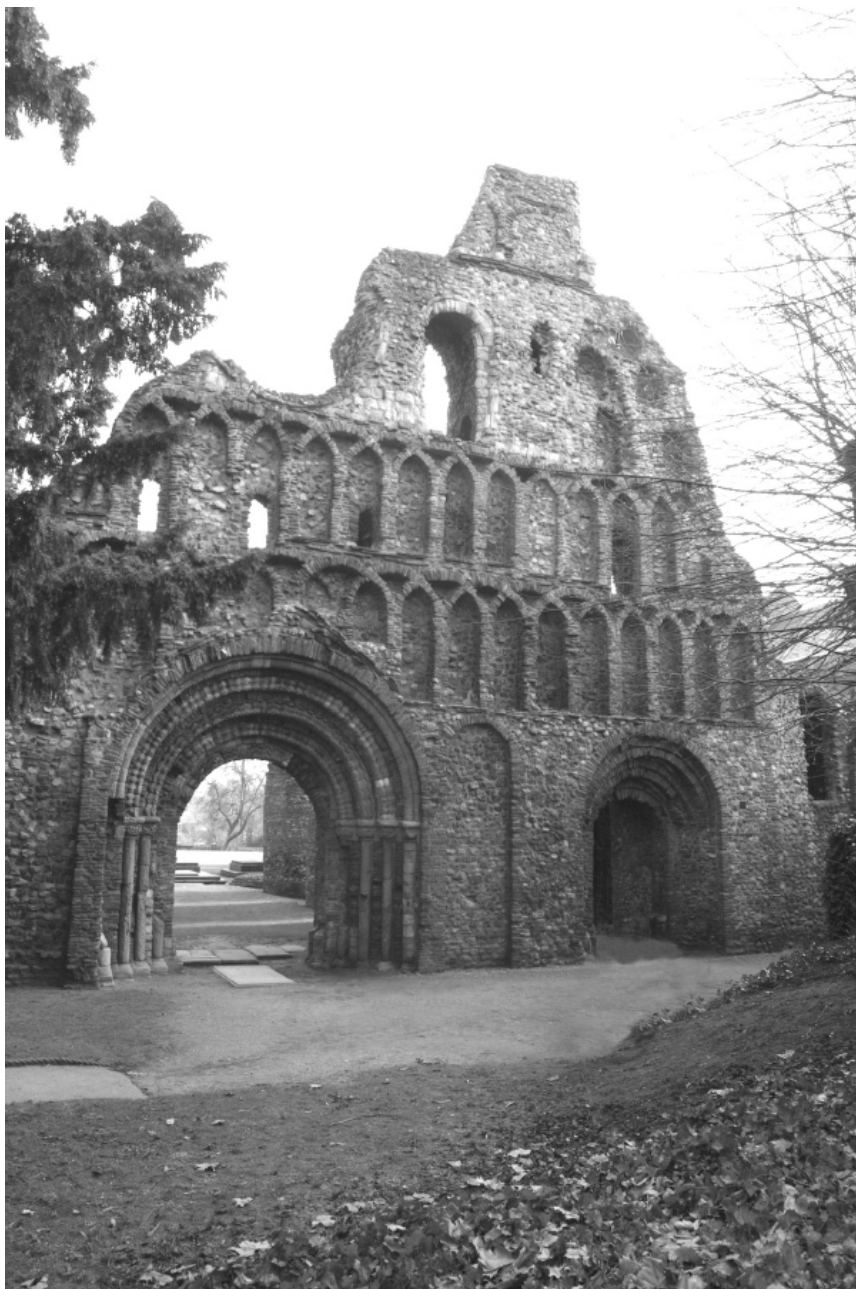


Fig 10.5 The west front of St Botolph's Priory contains the traces of the earliest major round window in England, c 1150 (Tony Nichols).

Architectural fragments from the abbey buildings have been found in the abbey grounds and on the south side of the town. Late 12th-century 'waterleaf' capitals found close to the

abbey at 2–3 Stanwell Street are probably from the abbey church or chapterhouse (*CAR* 6, 373–4), and the carved base of a quatrefoiled shaft of 13th-century date may have come from the abbey's cloister arcade (Clapham 1926, 450). Further fragments of carved stone were discovered incorporated into a late medieval refacing of the precinct wall and other pieces were found in 1973 during excavations in the graveyard of St Giles's Church (*CAR* 9, 220–1). The RCHME records that the churchyard wall of St Giles's had many worked stones from the abbey, including several portions of a wall arcade of the 12th century. The walls of the abbey's 15th-century gatehouse also contain reused worked stone (RCHME 1922, 48).

Other than the 15th-century gatehouse, the only part of the abbey to survive above ground level is the 2.75m-high precinct wall, which originally enclosed an area of approximately 5.6ha. The wall is depicted on Speed's 1610 map of Colchester and much of the original course is known. Several lengths of the wall survive, but later refacing and repairs have modified these stretches to the point that Sparrow concluded that little remained of the original (1943, 67). However, examination in 1972 of a 140m-long stretch of wall in the north-east corner of the precinct revealed that the original structure, which was preserved beneath later refacings, was built from reused Roman building materials including tile, septaria and Kentish ragstone. The rear face was well preserved and contained many putlog holes. The wall pre-dated the 13th century and the fact that the soil dump of 1133 appeared to have been deposited directly against its rear face suggests that it was an original feature of the monastery (*CAR* 9, 219).

The Augustinian Priory of St Botolph (MON364), located on the south-facing terraced slope of a small valley outside the town's southern gateway, may have been founded in response to the establishment of St John's Abbey (Fig 10.5). It was preceded by an earlier church (MON1018), which was served by a community of secular canons who decided to adopt the Rule of St Augustine. The church was refounded sometime during the late 1090s as a house of Augustinian canons and was the first such foundation in the country, for a time holding authority over all later Augustinian establishments in Britain. The priory church was built in the 12th century and was presumably finished by the time of its dedication c 1177 (VCH 1994, *Essex IX*, 304).

Only part of the monastic church survives above ground level. The ruins comprise the remains of seven bays of the aisled nave and of the elaborate west front flanked by north-west and south-west towers, which only partially survive. The church, which was cruciform and aligned east–west, with the nave separated from the presbytery to the east by the monastic choir, was 59m in length and 27m wide at the crossing. It was built of flint rubble and reused Roman bricks with dressings of Roman brick and some Barnack and Caen stone. The exterior would have originally been rendered with a layer of lime mortar to give the impression that better-quality materials had been used. Painted mason's lines on plaster survive on the north wall in the north aisle, and are probably 14th century in date (RCHME 1922, 50). Trial trenching in 1986 (CAT Report 1/86b) revealed traces of a previously unrecorded north transept, and excavation in 1991 (Crossan 1992, 103) at the east end of the nave revealed the position of the south transept and a short, square-ended presbytery. A crypt or undercroft discovered beneath the south transept extended under the crossing and presumably under part of the chancel, but does not appear to have reached beneath the north transept.

The richly decorated west front of the church is 19m across (Fig 10.6). The western façade contains an intricately carved central doorway with a round arch of five orders and the remains of two side doorways that led into the aisles. Above the doorways are two rows

of intersecting blind arcading and above that are the remains of a large rose window that was originally flanked by two round-headed windows. Over these was another row of intersecting blind arcading which partially survives. A drawing of the church by William Stukeley in 1718 shows that this wall arcade sat beneath three round-headed windows with the apex of the gable above and turrets on either side (Bodl MS Top. Gen. e 61 [unpubl]). Inside the façade a passage runs on the first floor from one tower to the other. In the 14th century new windows were inserted into all but the easternmost bay of the north aisle (RCHME 1922, 48).

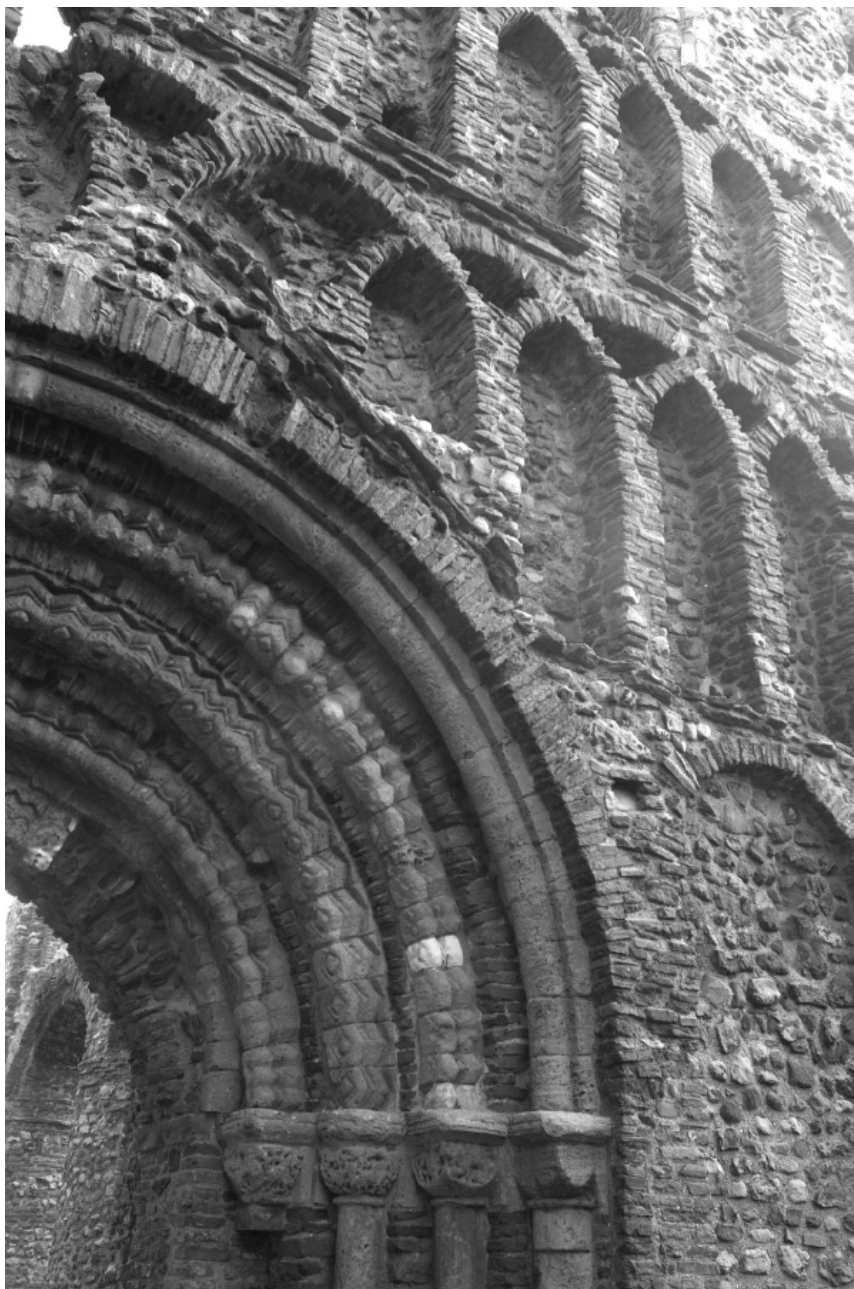


Fig 10.6 Detail of the architecture of the west front of St Botolph's Priory (Tony Nichols).

To the south of the church all that is visible of the domestic buildings is the base of the cloisters' northern arcade wall, which is terraced into the slope below. Some of the cloistral buildings were still standing in the mid-18th century, when they formed part of a brew

house (Morant 1768, bk II, 148), and evidence for the southern cloister was uncovered when the present parish church of St Botolph was built in 1838 (Peers 1964, 17). A small trial trench dug in 1999 within the projected south-east corner of the cloistral complex exposed only dark earth (Crossan 1999a).

Although the extent of the priory precinct is unknown, further details of its layout have been gleaned from historical maps, excavation and observation. Speed's 1610 map of Colchester shows that a stream bounded the priory to the south and that there were outbuildings to the south-east of the priory church. Excavations in 1987 revealed waterlogged deposits and two foundations (ELM1259; ELM1260) with adjacent floors situated south-east of the church (interim report in *Essex Archaeol Hist* 19 (1988): 264). These may have belonged to the infirmary, which typically would be located to the south-east of the church, or could have represented other service or industrial buildings related to the economy of the priory. Speed's map also depicts buildings to the south-west of the priory, including what appears to be a gatehouse and precinct wall. Part of this may have been recorded by Major Bale in 1898, when he observed a short length of thick rubble wall incorporated into the building at 37 St Botolph's Street (COLEM:1967.69.60). Short lengths of three parallel walls (ELM1261) recorded in the south-west corner of the site in 1944 (VCH 1994, *Essex IX*, 305) and a possible medieval timber drain (ELM1014) revealed during trial trenching at the rear of 31a St Botolph's Street in 1989 (CAT report 11/89a) may also have belonged to priory outbuildings. Observation and excavations around the east end of the church have revealed numerous inhumations which probably belong to the private cemetery of the canons (ELM938; ELM939).

Whereas Colchester's earliest monastic communities found the requirements of their spiritual life a discouragement to settlement within the town, the mission of the mendicant friars, who arrived during the 13th century, was directed towards the urban centre and it was here that the Franciscan Grey Friars founded their convent. The house of Greyfriars (MON971) stood on the north side of High Street between the castle and East Gate. The house had been established by 1237 and documentary evidence suggests that its precinct continued to grow in size throughout the 13th and 14th centuries until it covered a block of land between High Street, the castle bailey and the town walls to the east and north (VCH 1994, *Essex IX*, 306). Key components of the friary were the church and cloister, the hall, the infirmary house, the chambers, the kitchen, bakery and brewery, and two small gardens and additional lands within a walled precinct which was entered through a gatehouse in Friar Street (the continuation of High Street beyond the castle to East Gate). Two ponds recorded at the north end of Priory Field in 1794 were probably former fishponds (ibid, 306–7). Little is known about the precise layout of the friary, although an early 18th-century drawing by William Stukeley shows that the cloister and domestic buildings were on the north side of the church, which was set back from the High Street and contained 13th-century lancet windows (Bodl MS Top. Gen. e 61). The monks' cemetery (MON989) was probably discovered in 1847, when William Wire recorded on a site plan the discovery of several skeletons with heads to the west situated to the north-west of the 18th-century house 'Grey Friars', on the High Street (EVT3833, VCH 1994, *Essex IX*, 307). Wire also recorded a flagstone floor (GRP127) at the north end of the precinct (Wire nd, 18.6.52) and the discovery of carved stone including part of a window and a capital, mullion and window-head (ibid, 11.9.52), presumably derived from the monastery buildings. A watching brief undertaken at 67 Castle Road in 1997 revealed an undetermined medieval feature and quantities of food waste which may have come from the friary (CAT Report 7/97/C). In 2006 a series of six trial trenches was dug in the car park to the rear of the

existing Grey Friars College, the main discovery being part of a large east–west foundation some 2.4m wide which was interpreted by Philip Crummy, on the basis of historic map evidence, as part of the friary church (Crummy 2007b, 24–5).

A second community of friars, belonging to the smaller order of the Friars of the Holy Cross or Crutched Friars, was established in a suburb outside the south-west corner of the town. The House of the Crutched Friars (MON383) was situated on the south side of Crouch Street, just west of its modern junction with Maldon Road. The friary is first recorded in 1251 and originated in the 13th century as a hospital and chapel (sometimes called St Cross Hospital and St Cross Chapel) founded by the lords of Stanway (VCH 1994, *Essex IX*, 307). The precinct and its related buildings are shown on Speed's 1610 map and appear to have occupied a triangular plot extending from the west side of Maldon Road to what is now the rear wall of properties on the west side of Wellesley Road.

In 1928 Rudsdale noted various foundations on the site of 42 Crouch Street (CMR 1929, 50–2) and an excavation in 1988 revealed part of a large east–west building (MON381) which fitted well with Rudsdale's plan. Two large foundations defined the structure. These were 6.5m apart, with a probable range of 3m-wide rooms of lighter construction to the south. The main foundations were shallow and of stone and mortar construction with some peg-tile fragments and in places a bedding layer of gravel. Another foundation observed in section further to the east consisted of an upper part of stone and mortar which was 1.5m wide and 0.8m thick, and a lower part which was 1m deep, 2m wide and comprised alternating layers of sand/gravel and topsoil. Further walls were identified by robber trenches, but dating evidence for the structure was sparse. Conclusive evidence for the plan of the friary church was recovered during further excavations in 2006. These revealed the remains of similar wall foundations to those found in 1988 and two massive square pier bases. It is now known that the church was of cruciform plan with square-ended transepts and chancel, and a central crossing tower. Very little of the church's floor levels had survived, although in the south transept there was a small area of mortar bedding bearing the imprint of a tiled floor. *Ex situ* plain glazed floor tiles were found elsewhere (ELM1355; Benfield 2007, 21–3).

Observations in the vicinity of 32–46 Crouch Street in c 1895, 1928 and 1977, together with a rescue excavation in 1988, have recorded numerous medieval east–west inhumation burials situated along the street frontage (*CAR* 9, 245–56). These are thought to belong to the friary's burial ground (MON382). During the 1988 excavation by CAT there was no evidence that any of the bodies had been buried in coffins or with grave goods and dating evidence for the cemetery was insufficient to determine whether they were burials from an earlier phase of use by the friars themselves or from a later phase by the laity from the surrounding neighbourhood. The friary's chapel was granted burial rights in 1402 and the intercutting of graves and large quantities of human bone recovered from the 1988 excavation indicate that the cemetery was long-lived and had been used intensively (*ibid*, 248). Further investigations in 2006 recovered disturbed human bone from upper levels, but lower down some 60 *in situ* burials were recorded from the area of the north and south transepts. As before, there was no evidence for coffins or grave goods (Benfield 2007, 22–3). Other disturbed inhumations were observed at 32 Crouch Street in 1981, but could not be dated and may have belonged to an adjacent Roman cemetery (CAT Report 3/81; *CAR* 6, 975–6).

The St Cross Hospital was one of four extramural medieval hospitals known to have existed at Colchester. Another was the hospital of St Mary Magdalen, which was probably founded in the early 1100s by Eudo Dapifer as a semi-monastic isolation hospital for lepers.

The hospital complex stood on the north side of Magdalen Green, north of the road leading to the medieval port of the Hythe, and is a useful indicator of the limits of settlement on the east side of Colchester at this time. In its earliest form the hospital comprised a 12th-century chapel (MON344) and at least one utilitarian building (MON968). The chapel is known from excavations that took place in 1989 on the site of the demolished medieval parish church of St Mary Magdalen (MON344). The hospital chapel had been converted in the early 13th century into the church, with the latter's nave resting on the earlier building's 12th-century foundations. These foundations were composed of alternating layers of light clay and compact mortar, a distinctive building technique found on a number of Colchester's monastic sites, such as St John's Church (MON345; Crossan 1990, 10). The other hospital building (MON968) lay directly to the east of the chapel, but only a few remnants of early medieval wall foundation survived, giving no indication of its function.

In 1237 the hospital was placed in the charge of St John's Abbey and by this time had given its name to the new parish of St Mary Magdalen, with the master of the hospital taking on the responsibilities of parish rector. Seventeenth-century and later depictions of the parish church of St Mary Magdalen (MON344) show that it comprised an aisleless nave and chancel, and the excavations in 1989 revealed the much-altered nave, chancel and porch of the medieval church. A grave found under the floor of the parish church contained the remains of a male skeleton with a pewter chalice laid on his chest, a strong indication that he was an early master of the hospital (Crossan 1991, 20).

When the chapel of St Mary Magdalen achieved parochial status, the hospital was provided with a new chapel, known from Speed's map of 1610 as the Maudlin Chapel. This was discovered in 1995 when excavations revealed the chapel (MON994) and a later medieval building (MON995), interpreted as a dormitory or living quarters (Crossan 1996, 8–11). The 13th-century chapel was built largely of reused Roman materials and had a simple earth floor and glazed windows decorated with a variety of red-painted foliage designs. It was almost six times the size of its 12th-century predecessor, with a floor area of almost 150m². The other hospital building (MON995) was also built from recycled Roman material and had earth and clay floors with a tile hearth prominent at its western end. Two areas of the building had been used for the repeated melting of lead, suggesting that objects were being cast within it. No obvious medically related glassware, pottery or instruments were recovered from the site, but preliminary work on the skeletons recovered from the graveyard (MON991) revealed details of the illnesses suffered by the hospital's inmates (Crossan 1991, 20).

Very little is known about the town's other two medieval hospitals. One, located in Crouch Street, was dedicated to St Catherine and had been set up somewhere along the street's north side by 1352. By 1379 another hospital had been established at the site of St Anne's Chapel (MON346), on the south side of Harwich Road and alongside St Anne's Holy Well (MON908); it was approximately 1km from the town's East Gate within the parish of St James and was probably in existence by 1344. Nothing is known about the archaeology of the site, which has been built over.

The exact number of other early medieval chapels in the UAD study area is also unknown, and the locations and form of those that have been documented remains obscure. Within the town walls, the best-known example is St Helen's (MON305), on the corner of Maidenburgh Street and St Helen's Lane. According to the *Colchester Chronicle*, the chapel was restored by Eudo Dapifer in 1076, when it was granted to St John's Abbey, but the present single-celled structure shows no structural evidence earlier than the 13th century. The chapel measures 10m by 4.2m and has walls built of rubble with bonding courses of

modern brick and dressings of limestone. Two lancet windows in the north wall date from the 13th century (RCHME 1922, 50), and repairs are recorded in 1265. The chapel appears to have fallen into disuse by the end of the 13th century, but was refounded in 1322 (VCH 1994, *Essex IX*, 337).

A second intramural chapel (MON976) was located in the triangle of land formed by Church Street, Head Street and Church Walk. The chapel was dedicated to St Andrew and formed part of an estate belonging to the bishop of London in 1086 (*ibid*, 39). Outside the town walls a chapel dedicated to St Thomas (MON354) was recorded from the early 13th century and may have been located on St John's Green, where a chapel with the same dedication was known to exist in the 15th century. A second chapel on St John's Green was dedicated to St Mary (MON353), but was not recorded until the second half of the 14th century (*ibid*, 338).

In addition to the extramural chapels that were established during this period, new churches were also founded within the town's developing suburbs. The parish church of St Giles (MON342) was erected sometime between 1133 and 1165–71 on made ground to the north of St John's Abbey church (*CAR* 9, 223), within an existing cemetery. The church was appropriated by the abbey *c* 1220 (VCH 1994, *Essex IX*, 315), possibly for the use of its servants and tenants. Excavations in 1973 and 1975 revealed that the foundations of the Norman church were about 1.1m wide and 0.8m deep, and had been dug through the thick deposit of dump material dating from the 1133 demolition of the abbey buildings. Trenching in 1972 revealed a straight north–south foundation belonging to the original east wall of the chancel, indicating that it was square-ended rather than apsidal (*CAR* 9, 225). A lancet window recorded in the southern side of the existing chancel suggests that it was rebuilt in the 13th century (RCHME 1922, 43). Excavations in 1975 within the nave of the church exposed the northern wall of the original nave. This had been replaced with an arcade when the northern aisle was added, probably in the late 14th century (*ibid*, 42–4). Therefore, the church originally comprised a long narrow nave measuring 19.7m by 6.3m internally and a rectangular chancel some 7.5m long. Reused Roman brick was used extensively throughout the Norman building. Close to the west end of the nave the lower parts of the south doorway survive from this Norman phase and to the east is part of a blocked narrow round-headed window (*CAR* 9, 223).

Late medieval burials discovered in 1971 to the west of St Giles's recent graveyard are thought to have been part of its cemetery (MON377), indicating that it originally extended beyond the boundaries of the graveyard walls (*ibid*, 221). The excavations in 1975 also uncovered several burials to the north of the nave that were concealed by the construction level of the 14th-century aisle. This implies that the abbey's precinct wall originally ran to the north of the church so that St Giles's lay wholly inside the cemetery (*CAR* 1, 41).

The foundation of St Leonard's church, on the north side of Hythe Hill, must be directly linked to the development of the early medieval port at the Hythe and the settlement that grew up around it. The earliest record for a church on the site is *c* 1150, when the church of 'Hethe' was given to St John's Abbey (VCH 1994, *Essex IX*, 319), but the earliest identified components of the existing structure all date to the 14th century, including the chancel, the north nave arcade and the north aisle, dated to *c* 1330–40. The north vestry was also added at this time or shortly afterwards. The church's walls are built of mixed rubble, septaria, flint, pebbles and freestone, with dressings of limestone.

Many of the walled town's Anglo-Saxon churches were probably rebuilt in stone during the 12th century, but they appear to have been relatively small and unimposing. They were mostly constructed using masonry rubble and reused Roman tile and brick (*CAR* 1, 47–8).

By the late 11th century the parish of St Peter's (MON336) was the most prosperous in the town and its reference in Domesday indicates that the church was well established and richly endowed by 1086. Unfortunately the surviving church shows no evidence of an early building other than the ornamental metalwork on its south door, which dates from the 13th century (Rodwell and Rodwell 1977, 28–9). By the 11th century, St Martin's church (MON324) in West Stockwell Street was probably a cruciform building with chancel and a nave with north aisle and transepts. The RCHME assumed that the oldest surviving work was of an early 12th-century date (RCHME 1922, 37), but Rodwell and Rodwell believe that it could be Anglo-Saxon (Rodwell and Rodwell 1977, 29). The west tower is a rare Norman survivor containing much reused Roman brick. All Saints church (MON327), on the south side of the High Street, is a simple structure of which the nave and chancel are the oldest parts, with proportions characteristic of a Norman date. No early medieval detail now survives, although the doorway in the centre of the south wall of the chancel may have been Norman, and Rodwell and Rodwell identified its early medieval form as that of a three-celled Norman church (*ibid*, 30). Also on the High Street, St Nicholas's church was recorded as 14th century by the RCHME (1922, 39) although its earliest surviving detail was a 12th-century piscina (Rodwell and Rodwell 1977, 31). St Runwald's church (MON48) is believed to have been an Anglo-Saxon foundation. Demolition of the building in 1878 showed that its walls were built of coursed rubble (Rodwell and Rodwell 1977, 33) and its prominent position on the High Street would favour a post-Conquest rebuild. Its medieval chamfered stone altar now stands in St James's church (Gant 1960a, 47). The present building of St James's church (MON329) appears to have originated in the 12th century and, despite much alteration in later centuries, architectural elements from this period are evident in the north-west angle of the nave. The walls are of flint and septaria rubble. The town wall forms the northern boundary of the church's graveyard (MON330), but several watching briefs within the graveyard have added little to our knowledge of this site.

During the 13th and 14th centuries Colchester's wealth was partly channelled into alterations and additions to the fabric of the existing church stock, although this work was relatively insignificant in comparison to the earlier foundations and much has been hidden by later remodelling. The chancel of St Martin's was rebuilt in the earlier 14th century and, during the 14th or 15th century, the nave, north aisle and transepts were rebuilt and the south aisle added (VCH 1994, *Essex IX*, 323). Holy Trinity (MON340) and All Saints churches (MON327) also underwent alterations in the 14th century, both buildings having their chancels rebuilt. In St James's church, the two east bays in the nave's southern arcade date to the late 13th century and there is some structural evidence to suggest that the church had transepts at this time. The tower may also have been added during the 13th century. Early 14th-century alterations included the addition or rebuilding of the two east bays of the nave's north arcade (RCHME 1922, 35).

Colchester's small medieval Jewry was served by a synagogue (MON966), which was first recorded in 1268 when it was contained within a house located in either East or West Stockwell Street. By 1285 it had moved to a solar at the west end of High Street (VCH 1994, *Essex IX*, 28). The fact that the synagogue was contained within a private house means that it is unlikely to be traceable in the archaeological record.

Public buildings and works

The most prominent public building was the lavishly decorated moot hall on the High Street (MON974), first recorded in 1277, which survived until its demolition in 1843. The

plan of the building complex cannot now be restored, but several pictures of the hall survive which show its southern elevation (COLEM:1968.108.A13 and COLEM:1985.155.A1.32A). These depict a fine raised hall aligned east–west, the floor of which was elevated 1.8m above the street level, suggesting that the basement must have been partially sunk below ground level. The hall had doorways in both its northern and southern walls. The southern round-headed door was centrally placed and flanked by two round-headed windows, the sills of which were 0.9m above the floor of the hall. A third round-headed window was situated in one of the end walls and has been used by George Zarnecki to date the building to c 1160, a conclusion based on similarities with ornament at Rochester Cathedral and the Priory Church at Dover (*CAR* 1, 63–7). The moot hall would have been in existence by the time of the town's first charter in 1189.

Historical sources reveal that a grammar school (MON977) was founded in the early 12th century on a site adjoining St Mary's churchyard and to the east of the gate at St Mary's steps (VCH 1994, *Essex IX*, 352). By 1285 the town's bailiffs had the use of a gaol to imprison suspected offenders (*ibid*, 275), but its location is unknown. No major public building work appears to have been undertaken by the borough in the early 14th century apart from the repairs to the town walls already noted. However, in 1321 the burgesses petitioned Edward II to allow them to increase the income of the borough by developing waste spaces in the town (Britnell 1986b, 116). The petition was successful and as a result the burgesses tried to develop certain areas, such as Maidenburgh Street and Eldland, through the rental of plots. These sometimes had leases requiring the new tenant to build a house (VCH 1994, *Essex IX*, 42). The burgesses were also responsible for the maintenance of at least two stone bridges: East Bridge (MON923), first recorded in 1238, and North Bridge (MON922), first recorded in 1189 (*ibid*, 234–5). No trace of these structures has been recorded.

Aside from the wells located on private property, water was supplied from wells and springs within and around the town walls. A number of named wells, including Stanwell, Stockwell, Chiswell (outside the north-west corner of the town) and Childwell (near Magdalen Street), are recorded in the 14th-century court rolls and appear to have been placed close to spring heads (*CAR* 3, 26). These would presumably have been relatively shallow, but to date no structures associated with the wells have been recovered.

Domestic architecture

Stone houses

In the early medieval period several secular buildings were constructed using building materials robbed from the ruins of the Roman town. Excluding the moot hall and castle with its associated structures, at least five masonry houses that were built in this manner are known, all of which were concentrated near the commercial centre of the walled town and in particular along the High Street (Fig 10.7). They belong to a tradition of prestigious stone houses in towns across England by the late 12th century. The owners of these stone houses are likely to have been wealthy and we know that the 13th-century owner of the Pelham's Lane house in Colchester (MON981) was Joan, daughter of Richard Marcian, one of the town's leading men (VCH 1994, *Essex IX*, 41). Platt has suggested that the main campaign of stone building in the towns coincided with the confirmation of the town's liberties, or freedom from outside control, although security and fire safety are other likely reasons (Platt 1976, 59). In some towns, stone houses have been linked to Jewish financiers, who might especially benefit from the additional security afforded by such a structure. A

reference of 1275 to two stone houses in St Runwald's parish in Colchester confirms that a Jew owned them (Stephenson 1983–4, 50). The number of stone houses in Colchester is similar to that of Canterbury, where at least 30 such buildings, that were thought to have been built largely by Jewish financiers, existed by the early 13th century (*CAR* 1, 69). All the stone houses along Colchester's High Street were set back from the street frontage, implying that it was already occupied by lesser houses and shops by the time of their construction (*ibid*, 53–70).

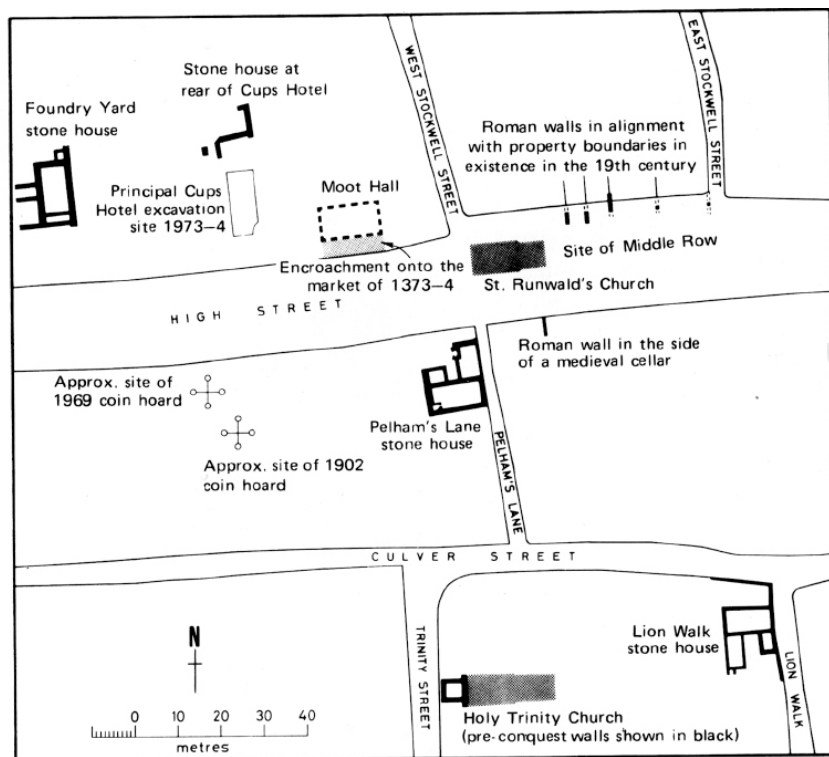


Fig 10.7 A plan showing the medieval stone houses recorded in the town centre (from CAR 1, fig. 53).



Fig 10.8 The Norman house at Foundry Yard photographed during its demolition in 1886, showing the exterior western wall and the interior of the building beyond (Colchester Museums).

At Foundry Yard, 70m west of the moot hall, a stone building (MON980) survived until demolition in 1886, when a ground plan and elevations were drawn, photographs were taken and a painting was made of the basement (Fig 10.8). Rudimentary excavations carried out on the structure by Dr J H Round led him to suggest that it formed part of a group of tenements off the High Street (*Essex Standard* of October 1886). Using these sources, Crummy constructed an isometric plan of the building (*CAR* 1, fig 51), which shows it to have consisted of a first-floor hall containing at least three round-headed openings, two of which were probably doorways and one of which was a window. To the south was a narrow east-west room which contained a tall round-headed window in its eastern wall. The hall lay over a barrel-vaulted basement sunk partially below ground level and contained four or five loop windows, three original doorways and seven round-headed recesses.

The remains of a second stone building (MON643), situated between Foundry Yard and the moot hall and set back from High Street, were uncovered following excavations on the site of the Cups Hotel in 1973–4. Only the building's eastern and southern walls survived, together with three parallel north-south foundations which lay on the south side of the eastern wall. These indicated that the building probably took the form of a central hall with two wings, one on the south-east side of the hall block and one on its south-west side. The walls were built of reused Roman building material and the structure was tentatively dated to the early medieval period on the basis of an absence of peg tile. The walls rested on foundations more than 0.8m deep, which consisted of horizontal layers of septaria and sand, mortared septaria, chalky mortar and, at the bottom, septaria in sand and loam. No floors of the building survived, but a latrine pit (GRP13) inside its east wing may have been associated with an early phase of the structure (*CAR* 6, 338). On the opposite side of the High Street, at its junction with Pelham's Lane, stood another of the town's stone buildings.

The rear part of this 12th-century house (MON981) consisted of a first-floor hall with three south-facing windows over a barrel-vaulted basement. The basement may have been at ground level and contained a wall fireplace in its northern wall, although this was probably a later addition. The building was demolished in 1730, but a drawing of the elevation of the rear wall and a measured ground plan made at the time have enabled the production of a reconstruction drawing (*CAR* 1, fig 52). Stone-built walls were found on the site during redevelopment in 1935 (CMR 1935–7, 45).



Fig 10.9 The cellar beneath 35–37 High Street showing a rubble wall with surviving 14th-century features (Philip J. Wise).

Perhaps the most important of all the stone buildings for our knowledge of domestic housing in early medieval Colchester was the 12th-century stone house (MON492) recorded during the excavations at Lion Walk in 1972–3 at the corner of Lion Walk and Culver Street. Part of one of the building's walls survived above ground until its demolition in 1971 (RCHME 1922, 64), when it was found to have originally contained a round-headed doorway of 12th-century date in its centre, another round-headed opening at its west end and a small recess in its south side. A two-centred doorway had been inserted into the east end of the wall in the 13th or 14th century and additional alterations were made to the wall between the 14th and 16th centuries. During excavation the building was found to have witnessed three main phases of use, the first of which was dated by the excavators to between *c* 1150 and *c* 1500. It probably originated as a single-roomed first-floor hall-house with a basement at ground level. The wall that survived until 1971 had formed the northern side of the hall's basement and consisted mainly of coursed Roman rubble. Externally there were several pits, including a large 12th-century cess pit and a large timber-lined pit, and a yard area surfaced with gravel. The original hall had two rooms added to its south side during the 12th century. Internal features of these rooms included hearths, small pits and the shallow, uncoffined burial of a baby. A sixth stone-built building has been tentatively identified at 7 East Stockwell Street (MON170). The present building is 17th century in

date but contains a rubble wall orientated north–south, suggesting that it occupies the site of another stone house, albeit one that cannot yet be dated (RCHME 1922, 63).

Cellars

That the use of stone in domestic building extended beyond the Norman period is clearly illustrated by the large number of medieval cellars or undercrofts within the walled town that have rubble walls. Houses with cellars below the shops are recorded in the market area of the High Street by the late 13th century, reflecting the importance of this area as the commercial centre of the town, where burgesses would have required space beneath their shops in which they could store merchandise prior to its sale (VCH 1994, *Essex IX*, 41).

Three of the cellars situated along the High Street contain two-centred door heads and are datable to the 14th century. The cellar at 45–47 High Street (MON35) has rubble walls and a cross-wall with the 14th-century doorway within it. To the west of the doorway is a pointed niche. That at 35–37 High Street (MON31) is a particularly interesting cellar as it has a north-facing rubble wall incorporating a moulded door arch with carved heads, a moulded window and a pointed niche set back some 4m from the High Street frontage (Fig 10.7). The cellar at 137 High Street (MON39) has rubble walls with a 14th-century doorway and a round stone well-shaft in one corner. Two other cellars with rubble walls survive at 34 High Street (MON30) and 48–49 High Street (MON36). The former incorporates a section of Roman walling, but they are otherwise undated (RCHME 1922, 56–60). Another early stone cellar (MON609), belonging to a house that once fronted onto Head Street, was revealed during the Culver Street excavations. The surviving walls were built of roughly coursed ragstone, reused Roman tile and peg tile. Features set within the walls included a socket and three niches with pointed heads formed from peg tile. The cellar's construction date was placed somewhere within the 13th to 15th centuries (*CAR 6*, 125–6).

Non-masonry domestic buildings

The structural evidence for non-masonry domestic buildings dated to this period is poor, although other physical remains indicative of domestic activity are reasonably plentiful. As many as 15 buildings belonging to the period have been identified within the study area, but the dating evidence for these structures is rarely unequivocal.

Almost nothing is known of the earliest non-masonry dwellings within the post-Conquest walled town, but excavations at Culver Street revealed the base of an early medieval sunken-floored hut (MON610). This took the form of a rectangular pit with three evenly spaced postholes along each of the sides. The pit measured 5.5m by 2.8m and was 0.4m deep, although it had probably been truncated by later cultivation. The building appeared to belong to the 12th century, but could have been Anglo-Saxon (*CAR 6*, 120–2). A second early medieval sunken feature (GRP6) was recorded outside the town's North Gate during excavations at Middleborough (*CAR 3*, 189).

An earth-fast building (MON611) of possible 11th- or 12th-century origin was also found during the Culver Street excavations. This was represented by a number of post pits, several of which formed a rectilinear plan which was interpreted as a utilitarian building standing at the rear of a tenement which fronted onto Head Street (*CAR 6*, 122–3). Considerable quantities of 12th-century pottery found in pits and robber trenches on the south side of the site may have derived from the building or could represent dumping to the rear of houses on Head Street.

Our knowledge of 13th-century housing within the town is equally poor despite the

development of masonry foundations at this time, which can be viewed as part of a national trend towards the increased use of stone for building from the early 13th century (Platt 1976, 59). Excavations at the Cups Hotel in 1973–4 revealed the remains of a c 13th-century stone-founded building (MON641), a shallow, patchy foundation of mortar and septaria which appeared to be the base of a rear wall from a house fronting onto High Street. To the rear of the building several shallow pits dug into the dark earth indicated the existence of a garden (*CAR* 6, 335; *CAR* 7, 9). Documentary evidence suggests that the building's position on the High Street would mean that it is likely to have been two-storeyed, mirroring the stone-built houses in the immediate vicinity. A house with upper and lower rooms was recorded in East or West Stockwell Street in 1258 and a tenement in the High Street with a room under the solar was recorded in 1263–4 (VCH 1994, *Essex IX*, 41). Evidence for another 13th- or 14th-century building (MON181) was found on the west side of the 12th-century masonry house at Lion Walk. The earliest traces of occupation on the site consisted of a gravel floor cut by several stakeholes, but with no clear evidence for walls. These remains overlay 12th-century robber trenches and some 13th-century pits (*CAR* 3, 82).

Our knowledge of 14th-century houses within the town is significantly better than that of those from earlier centuries thanks largely to the redevelopment of Angel Yard in 1986 and detailed documentary records. Excavations at Angel Yard revealed at least four 14th-century or earlier buildings that formed a distinctive settlement pattern within this part of the town centre, consisting of crowded frontages with long straggling buildings reached by narrow alleyways and enclosing gravelled yards (Shimmin and Carter 1996, 63). Two houses along the High Street frontage (MON54 and MON55) and two buildings extending back from the West Stockwell Street frontage (MON57 and MON58) were investigated. None of these buildings could be dated earlier than 1300 and they were seen to represent a rapid expansion of building backwards from both the High Street and West Stockwell Street frontages in the 14th century (*ibid*, 63). Only two rooms were uncovered from MON54, which is thought to have consisted of a building fronting onto the High Street with a wing extending back to the north. Internal and external wall foundations were constructed from septaria with some flint and tile fragments set in mortar. These presumably supported a timber-framed superstructure. Within the building, one room contained a series of ovens and hearths and was probably a kitchen. Multiple-phase floors were of daub or peg tiles and cobbles. The other room had daub floors and a hearth.

Although there was little structural evidence for the earliest phase of MON55 along its High Street frontage, it is thought to have consisted of a two-storeyed hall-block set lengthways to the street. Such a wide frontage onto the market place may indicate that the tenement belonged to an early period, when plot areas were relatively large. Behind the street frontage there was an extensive north–south wing. Fragments of rubble plinths from the southernmost room of this rear wing were found associated with a daub floor and, further to the north, two stone-and-mortar foundations indicated the northern end of another room. External wall foundations were constructed from stone and mortar with an upper course of slate. Internal features included daub floors and a series of large ovens that may have been in commercial use; the large number of ovens in the rear rooms suggests that the rooms were open to the roof (*ibid*, 46). External features included a gravelled yard area to the east associated with gullies and pits, and a north–south foundation along the western side of the building, which may have supported a freestanding wall.

The presence of an east–west wing extending back from the West Stockwell Street frontage indicated the location of another building (MON57). External foundations were of

stone and mortar construction and presumably supported a timber-framed and, probably, two-storeyed superstructure. Other associated features included a well and a gravelled area to the east. The fourth building (MON58) survived as the remains of a rectangular block or wing to the rear of the street frontage. External foundations were constructed of septaria and tile set in mortar. The building included at least one demolished oven, a small pit and a hearth. External features included several fragmentary rubble foundations to the east, which may have belonged to an outbuilding, together with numerous pits.

Traces of a 14th- or 15th-century building (MON627) were revealed during excavations at Long Wyre Street Co-op site in 1979, where stakeholes were found associated with a possible masonry plinth as well as part of a hearth or oven and several cess pits (CAR 6, 361). One unlined cess pit produced a stratified group of pottery dated to c 1300–25 (CAR 7, 9).

The quality of early 14th-century accommodation in Colchester is best revealed by the tax assessment of 1301. This record reveals that the wealthier tradesmen in the town had a hall, chamber and kitchen; a tradesman of the middle status had a hall and a chamber; and the poorest had just a single living room. In the same year the tanner John Menny is reported as having a hall, chamber, kitchen, granary, bake house and tannery, while Roger Dyer's house consisted of a living room, chamber, kitchen, brew house and probably a separate dye house, and Peter le Wylde had a hall, chamber, kitchen and a barn to store his grain (Britnell 1986b, 10–11). Thus differences in status between the town's tradesmen appear to have been largely reflected in the size of an individual's dwelling and the number of rooms within it, although some differentiation may have been apparent as a result of the materials from which the houses were built. Clearly most 14th-century houses would have been built of timber and plaster, like the one near East Gate recorded in 1321 (VCH 1994, Essex IX, 41), but excavation has testified that the earlier stone-built houses, such as the building at Lion Walk (MON492), continued in use throughout the Middle Ages.

One class of evidence that might allow the identification of wealthier dwellings in the town is the ceramic louver, which first appeared in Colchester during the second half of the 13th century (CAR 3, 211–14). Cotter has tentatively identified a link between louvers and the detached kitchens and hearths of houses belonging to reasonably wealthy townspeople such as merchants and government officials (CAR 7, 165). Certainly, the use of such elaborate ornaments indicates a change in roofing materials from thatch to tiles and slate which may have been a response to fashion, but was probably also undertaken deliberately, as fireproofing. Louvers from the early medieval period have been found mainly on high-status sites and those along the town's main streets. They have been recovered from the castle bailey, East Stockwell Street, Long Wyre Street and the stone house on the corner of Lion Walk and Culver Street (CAR 3, 211–14; CAR 7, 65).

Other structural evidence for domestic occupation

The dearth of structural remains from the walled town means that areas of domestic occupation are best indicated by the numerous rubbish and cess pits which have been recorded. These are well represented from the late 11th century and particularly the 12th century, but appear to have been dug less frequently during the 13th and 14th centuries. Cotter regards this reduction in pit-digging as the reflection of a national trend thought to be related to plague prevention measures (Platt 1976, 72). The distribution of pits is concentrated along the main thoroughfares of the post-Conquest town: Culver Street, Long Wyre Street, Lion Walk, the Cups Hotel site, Angel Yard, Trinity Street and North Hill have all produced pits belonging to the 11th–12th centuries. At the Cups Hotel site on the

north side of the High Street many pits (GRP13) of 11th- and 12th-century date were excavated. These were of varying depth, the deepest being 2.7m, and the largest were probably cess pits. The pits were located to the north of an area of 11th- and 12th-century robber trenches, giving the impression that they were dug to the rear of a building fronting onto High Street. Further to the east, at Angel Yard, and away from the High Street frontage, the dark earth was cut by a large number of pits, most of which were of late 12th- or 13th-century date. They represent activity at the rear of buildings which once fronted onto the High Street and West Stockwell Street. Numerous pits were excavated, the larger examples of which included latrine pits and more mixed refuse pits (Shimmin and Carter 1996, 38). Much of the Culver Street development site, including sites D, E, J, G and H, had been affected by pit-digging during the early medieval period (*CAR* 6, 34; *CAR* 7, 7), and some of these may have been associated with horticultural activities, but those that formed deep steep-sided features were believed to be cess pits. A large number of early medieval rubbish and cess pits were found on the south-west side of the site and probably belonged to properties along the Head Street frontage. One large group of shallow pits of probable 12th- to 13th-century date was found associated with a 13th-century oven (ELM318).

At Lion Walk very few, if any, pits were dug before c 1050–1100, probably because the site was situated some distance from the High Street (*CAR* 12, 9–10), but pits dated to 1100–1150 and thus pre-dating the construction of the stone house (MON492), were found on site G. Pits containing pottery dated to c 1150–1200, which pre-dated the construction of the 13th- to 14th-century building (MON181), were excavated on site D (*CAR* 7, 4–5), although some of these pits were 13th century in origin (*CAR* 3, 82). Excavations at the Long Wyre Street Co-op site revealed 11th- and 12th-century robber trenches that were succeeded by an episode of pit-digging in the 13th and 14th centuries. Most of these pits were unlined and over 1.5m deep with near-vertical sides, suggesting that they were cess pits and pointing to occupation along the street frontage (*CAR* 6, 361). Further work on the site in 1999 revealed 13th-century robber trenches followed by 13th- and 14th-century pit-digging (Brooks 2004c, 32). Pits of late 11th- and early 12th-century date were found during excavations at 1 Trinity Street in 1977, and provide the earliest evidence for occupation along Trinity Street (*CAR* 6, 828). Another early medieval pit was recorded during investigative work at 21 North Hill, and pits of 13th- and 14th-century date are known from East and West Stockwell Streets.

Other features, such as individual walls, ovens, hearths and wells, also point to areas of domestic occupation within the walled town, but are often difficult to date accurately. Three early medieval ovens (ELM314–16), two of which could be dated to the 13th century, were recorded during the excavations at Culver Street (ibid, 123). At Angel Yard, a hearth (ELM1195), gullies, a large number of stakeholes (GRP3), particularly in the north-west corner of the site, and two stretches of foundation (ELM32 and ELM33) indicated ephemeral structures of probable 13th- to 14th-century date (Shimmin and Carter 1996, 42). Isolated floors that may belong to this period have been recorded at 1–3 Head Street (GRP95) and Castle Inn, High Street (GRP56). The Head Street example was constructed from daub (*CAR* 6, 793), while the floor at the Castle Inn in the High Street was of clay and included evidence for a hearth (CAT report 11/85b).

Water was supplied to the town by both public and private wells. The wells that have been found are usually lined with stone and tile and are medieval or later in date (*CAR* 3, 26). One early medieval well (ELM786), discovered during a watching brief at 12–13 High Street, was large with an internal diameter of 1.55m and a stone lining built from roughly

curved and internally faced septaria blocks and reused Roman tile. The absence of peg tile in the well's construction was consistent with a date prior to the 13th century (CAT report 1/86a). Other medieval wells have been recorded during archaeological investigations at 70 High Street, 137 High Street, Long Wyre Street, 17 North Hill and 51 West Stockwell, but dating is less certain.

Open space

Large parts of the land within the town wall were cultivated and kept as pasture. The royal demesne included land to the north-east of the castle (Morant 1768, bk I, 10) and accounts of the manor between 1276 and 1281 indicate that oats and rye were probably grown there, and sheep and perhaps cattle may have been kept on the land (VCH 1994, *Essex IX*, 30). In the south-east angle of the town walls, an extensive area of open land known as 'Beryfield' is mentioned in various Colchester documents (Laver 1923, 118–21), and crops were grown there in the early 14th century (Britnell 1986b, 10). Even behind the main streets there were still large areas of open space, like the curtilage at Culver Street recorded in *c* 1270, and much of this was probably used to grow foodstuffs or to keep livestock. In 1271 a house in Wyre Street was leased by the borough with two selions (narrow strips of land caused by ridge and furrow ploughing), a term which suggests it was or had recently been arable, and in 1335–6 another plot measuring 50ft by 20ft (15.3m × 6.1m) was leased. There was still pasture land in Maidenburgh in 1354–5 despite the borough's attempts to develop the area during the 1330s by leasing plots 18ft (5.5m) wide for buildings (VCH 1994, *Essex IX*, 42).

Convincing evidence for intramural cultivation in the 12th and 13th centuries was found during excavations at the southern end of the Lion Walk site (*CAR* 3, 92), and much of the area south of Culver Street was under cultivation (*CAR* 6, 122) in the medieval period. At Culver Street, Cotter has noted an instance of adjoining sherds dated to *c* 1175–1200 which were found 50m apart in contemporary layers. He suggests that the explanation for this may be ploughing, or the carting of topsoil or manure (*CAR* 7, 7). At the Long Wyre Street site, a layer of cultivated soil containing pottery dated to *c* 1300–1325 was found sealing the 11th- to 13th-century robber trenches and pits (*ibid*, 9). Robber trenches of the 12th or 13th centuries at the Gilbert School were similarly overlain by a thick layer of dark earth, indicating that the site was used primarily for cultivation (*CAR* 6, 139). Perhaps more surprising, considering its central location, is the suggestion of an 11th- to 14th-century cultivation plot (GRP120) at 22–24 High Street (Brooks 2004a, 67–8).

Suburbs

The physical evidence for domestic dwellings outside the town walls consists of a handful of excavated buildings and features and a single standing building that has been dated to this period. The most extensive excavation of one of the town's early medieval suburbs took place at Middleborough, immediately outside the North Gate. Houses are recorded here as early as *c* 1242 and existed beyond North Bridge by the 1270s (VCH 1994, *Essex IX*, 41). Excavations at Middleborough in 1979 revealed two 14th-century timber-framed houses and a structure interpreted as a potter's workshop on the west side of the road leading out of the walled town. The earliest of these buildings (MON332) was constructed *c* 1300–25 and started as a rectangular block consisting of a hall with central hearth and a service room to the south which contained a sequence of three ovens. The building's floors were of daub and the walls were timber-framed and set on surface-built mortared plinths of rubble and tile (*CAR* 3, 189–90; *CAR* 7, 67).

Situated adjacent to this house and immediately to the north, a second building

(MON333) could only be defined by postholes and a hearth, although some of the surface-built walls assigned to a later building could have belonged to this 14th-century structure (*CAR* 3, 199). A third excavated building (MON331) located to the rear of the site was associated with a number of early medieval pottery kilns but was of unknown function and uncertain form. The excavated remains consisted of postholes, stakeholes, slots and a possible hearth. Some of the postholes had been set in a trench and formed a straight line, but there were no floors associated with the building (*ibid*, 189). Other post-Roman remains on the site included a shallow sub-rectangular pit (GRP6) which had a shallow slot around its perimeter. The purpose of the structure was unclear, although it may have been the sunken floor of a building or hut (*ibid*, 209).

The town's eastern suburb also developed around a river crossing, at East Bridge, where settlement is documented from the mid-13th century (VCH 1994, *Essex IX*, 41). This early suburb probably had quays associated with it like those recorded in later centuries (*ibid*, 41), and it was presumably the river frontage that grew up first. By c 1300 settlement had spread to a point some 200m east of the bridge where the Rose and Crown Hotel now stands. A survey by the RCHME, including a dendrochronological date, has shown that this building incorporates the substantial remains of a timber-framed house dating from 1267 to 1332. (http://www.heritagegateway.org.uk/Gateway/Results_Single.aspx?uid=MEX1006553&resourceID=1001). The building was originally three bays in length: the central bay was a hall open to the roof, while the west bay, probably the upper end, was storeyed from the beginning. Substantial parts of the timber frame survive up to tie-beam level and incorporate passing braces and a mixture of notched-lap and mortice-and-tenon construction. The existence of such a substantial house in a suburban location implies that the settlement around East Bridge was of some importance despite its apparent separation from the walled town by the sparsely populated East Hill (VCH 1994, *Essex IX*, 41). The suburb's significance was presumably derived from advantages provided by its riverside location.

The suburbs that developed to the south of the town were first recorded in the 13th century, although earlier settlement is implied by the presence of the 11th-century churches of St Botolph and St John the Evangelist. Three houses outside the walls in Head ward, presumably in Headgate or Crouch Street, were recorded in the 1220s, and settlement along Crouch Street is likely to have developed as far as the House of the Crutched Friars by the time of its foundation in the mid-13th century. Houses were also recorded at Lodders Lane (later Abbeygate Street), Berisland (later Vineyard Street) and More Street (later Priory Street) during the 13th century. In 1297 St John's Abbey owned land and buildings in Stanwell Street and on St John's Green, and by that date there were houses outside Schere Gate (*ibid*, 42). To the south-east, documentary evidence suggests that Magdalen Street had developed as an agricultural suburb by 1300 (*ibid*, 42), and excavations at 11 Magdalen Street recovered features, including stakeholes and pits (GRP14), that could belong to this period (*CAR* 6, 341–4).

Excavations at Osborne Street in 1988 revealed a series of well-preserved wicker-lined drains and fences (GRP9) of 12th- to 14th-century date, which were presumably associated with properties on the western frontage of St Botolph's Street. Elsewhere a thick deposit of post-Roman topsoil covered much of the site, indicating that the area was not heavily developed at this time (Shimmin 1994, 46). On the opposite side of the street, a possible medieval timber drain (ELM1014) was recorded during a watching brief in 1989, although this may have been associated with the priory precinct rather than secular settlement (CAT Report 11/89a). Further to the west, along St John's Street, a single medieval cess pit

(GRP44) was recorded at the Cameo Cinema site (*CAR* 6, 984), and three possible medieval wells (ELM718–20) were uncovered on the St John's Car Park site (*ibid*, 876). Outside the south-west corner of the walled town, houses were recorded at the top of Maldon Road by 1349–50. A large circular oven (ELM75) tentatively dated to the 13th or 14th centuries has been excavated at Butt Road; it was 2m in diameter with foundations laid on a rectangular bed of clay measuring 3.5m by 3m. Although its exact use could not be determined, a domestic function was deemed most likely (*CAR* 9, 163).

The reuse of Roman materials

Colchester is a town with no local source of naturally occurring stone. The quarrying of surviving Roman structures was, therefore, an obvious response to the enormous demand for construction materials generated by ambitious Norman building projects like the castle keep, moot hall and great monastic houses (*CAR* 1, 47–8). The period also witnessed a shift from wood to stone in wealthier domestic and church buildings, and it is clear that the importing of expensive French and English freestones had little impact on the cannibalisation of the Roman town. The fabric of the surviving masonry structures from this period illustrates that much of the Norman building work was done with salvaged septaria, tile and brick, and most of the robber trenches excavated in the town have been dated to the later 11th and 12th centuries (*CAR* 7, 1). In addition to buildings, Roman *spoila* was used in the construction of a range of lesser structures such as lime and pottery kilns (*CAR* 3, 88; *CAR* 7, 57), and for grave linings (*CAR* 9, 218).

It can be assumed that, prior to the digging of robber trenches, any visible surface remains were stripped. This assumption is supported by the inclusion of whole Roman bricks in medieval walls of this period, such as those of St Botolph's Priory church, which must have originated from the superstructure of Roman buildings, their foundations usually containing little or no brick (*CAR* 1, 48). However, excavations at 98–99 High Street revealed that brick masonry, which would have been visible to the Norman builders, was not always salvaged (Hebditch 1971, 121) and it may be that certain materials were prized above others. The digging of pits at this site to recover the limestone facing of Roman piers appears to have taken precedence (Drury 1982, 339), and several pieces of limestone veneer were used in grave linings excavated at St John's church (*CAR* 9, 218). In other instances, as at Freda Gunton Lodge, the early medieval workmen were so thorough that the robber trenches they left behind (GRP26) are the only indication of the Roman buildings that once stood on the site (CAT Report 6/95a).

Early medieval robber trenches are almost as common as the dark earth through which the work gangs had to dig to reach their plunder. They have been found on most of the sites excavated within the town walls and, in this way, a substantial portion of the intramural area was swept of remains, improving the ground's suitability for cultivation (for example, at the Gilbert School) and easing future redevelopment. Robbing also occurred outside the walls in Roman suburbs such as Middleborough (*CAR* 3, 189), where the need for building stone would have increased as the medieval suburbs developed. Although only a few robber trenches can be dated to the 13th and 14th centuries, early court rolls show that the town walls were a commonly exploited source of building material during the 14th century (VCH 1994, *Essex* IX, 248), as they presumably had been for centuries beforehand. The section through the town wall at Lion Walk showed that the wall had been stripped of its outer facing by c 1400 (*CAR* 1, 48). It is perhaps not unreasonable to speculate that this late requirement for *spoila* can be linked to the development of stone-founded housing during the period, although the introduction of stone-built cellars and 13th- and 14th-century

alterations to the town's churches probably also accounted for some of the demand. By this time, of course, Norman as well as Roman buildings may have been available for recycling, and one documented instance of this can be found in St John's Abbey ledger, which records the lease in 1312 of a plot of land in Colchester with permission to remove the stone walls on it (VCH 1994, *Essex IX*, 57).

The Hythe, commerce, trade and manufacturing

The market

At the heart of the walled town lay the market place, centred on a widened section of the High Street and reaching from its junction with North Hill and Head Street down to St Nicholas's church. In 1285 market days were Wednesdays and Saturdays, but by the 14th century there may have been a market every day for the sale of goods including grain, dairy produce, poultry, fish and meat (Britnell 1986b, 9). Not all commodities appear to have been sold on a daily basis, though, and at some stage, areas of the market were divided up for the sale of different products. The corn market, for example, was held at the west end of the High Street, which had become known as Corn Hill by 1336. The sale of butcher's meat was limited to the market and the butcher's shambles was located in the middle, near to the moot hall.

By the later 13th century there were shops around St Runwald's church (VCH 1994, *Essex IX*, 41) and further encroachments onto the market area are recorded in the court rolls of 1339–40 (Shimmin and Carter 1996, 63). These encroachments may stem from the charter of 1321, by which the burgesses acquired the right to develop and raise rents for the borough from 'waste spaces' or vacant areas in the town (Britnell 1986b, 116). It has been suggested that several imprecisely dated foundations observed in service trenches on the north side of the High Street may have been the footings for shops or stalls (Hull 1958, 159; *CAR* 1, 49–50, fig 41c; *CAR* 6, 810; CAT Report 3/75b; Shimmin and Carter 1996, 64). The demand of traders for access to a good street frontage is also illustrated by conveyances in part of a messuage in the market during the 1240s and a dispute over half a messuage in 1248 and 1285. These suggest the deliberate partitioning of plots along the lucrative High Street where the demand for space was greatest (VCH 1994, *Essex IX*, 41). Excavation has so far failed to identify such division of properties and much of the significant archaeological information is likely to have been destroyed by later activity such as the digging of cellars.

Although the High Street was clearly the commercial centre of the town, copper-alloy balance arms found during the 1978–9 Long Wyre Street excavations and at Lion Walk provide evidence of trade along Colchester's secondary streets (*CAR* 5, 67). There is no archaeological or documentary evidence for the concentration of different trades in specific areas of the walled town during this period, but cobblers' shops were recorded at the south end of East Stockwell Street in the 13th century (VCH 1994, *Essex IX*, 40).

Fairs

St John's Abbey held an annual four-day fair (St John's) each June from the year of its foundation in 1095–6. This may have subsumed an earlier fair run by the burgesses. Following a grant by Richard I in 1189 a second annual fair (St Mary Magdalen) was held in July by the leper hospital of St Mary Magdalen, and in 1319 a third fair was granted to the town's burgesses by Edward II, to be held annually in October. This grant may have formalised a fair (St Denis's) that was already being held outside the precinct of St Botolph's

Priory. The fair at St Mary Magdalen's is recorded as having attracted merchants from Suffolk, Norfolk and Kent in 1318, and others from London and Cambridge attended the three fairs in the 14th century. None of the fairs seem to have been significant enough to entice foreign traders, however (VCH 1994, *Essex IX*, 272–3).

The Hythe

The port and settlement at the Hythe was a detached community situated on the west bank of the river Colne, 1.5km to the south-east of the walled town. That the settlement was separated from the walled town by open land can be inferred from the presence of the leper hospital of St Mary Magdalen, which was located roughly halfway between town and port. The first documentary record that refers to the settlement relates to a tenement there in 1160, but Cooper has suggested that the port's relocation from the former landing place, downstream at Old Heath, probably occurred in the 11th century (*ibid*, 47). This move was presumably spurred by the growth of Colchester's fishing industry and sea-borne trade, and probably included the construction of wharves and improvements to the river. Although no physical evidence for quays from this period has been discovered, a cut across the marshes in Wivenhoe parish, opposite Old Heath, appears to have been made before the early 14th century (*ibid*, 47).

Old Heath derives its name from the Old English *Ealdeþeþe*, meaning 'old landing place' (Reaney 1935, 376–7) and the Hythe, or New Hythe as it was known, takes its name from the same root (*ibid*, 376). An indication that the Hythe was a planned settlement may be inferred from the alternative name *Heia*, by which it was also known in the 12th and 13th centuries. This name may refer to enclosures or plots dating from when it was laid out (VCH 1994, *Essex IX*, 47). Whether or not the settlement was planned, it was almost certainly the riverfront that developed first, with the earliest dwellings and warehouses located behind the quays. Development would have then spread to the west along Hythe Hill, and St Leonard's church probably denotes the edge of the settlement at the time of the church's foundation in the 12th century. Historical sources reveal that the Hythe's facilities as a port were further developed in the 14th century, the borough leasing plots of land for new quays and quayside buildings (presumably granaries and warehouses) in the 1330s and 1340s (*ibid*, 31; Britnell 1986b, 18). By 1352 a back lane existed on the north side of Hythe Hill (VCH 1994, *Essex IX*, 47). Those owning property at the Hythe during the early 14th century ranged from local wool merchants to fishermen (Britnell 1986b, 18–19).

Archaeological evidence for settlement at the Hythe comes from a number of recent excavations along Hythe Hill. In 1994 a watching brief recorded a small section of unbound wall seemingly built from reused septaria and peg tile. The wall was located 40m from the modern quayside and may have belonged to a warehouse or other quayside building dated to the 14th century or later (CAT Report 12/94a). On the former Colchester Tractors site at 79 Hythe Hill, 13th-century dump layers may have originated as refuse accumulation from adjacent properties (Brooks 2000, 112). Similar levels were encountered further up the hill during excavations at 64–76 Hythe Hill, where the earliest medieval activity dated from the 12th or 13th to the 14th century and included a number of large pits, a cultivated soil and a possible earth-fast structure (interim report in *Med Archaeol* 44 (2000): 260). On the opposite side of Hythe Hill, evaluation trenches dug on the site of 117–119 and 124–125 Hythe Hill revealed 14th-century deposits (Austin 1998). The settlement's involvement in commercial activity during this period is shown by a 14th-century pottery measure discovered in Back Lane (COLEM:1322.1907) and a reckoning counter dated between 1321 and 1343 (N Crummy 2000, 122).

Fishing industry

Colchester's charter of 1189 confirmed the borough's ownership of the Colne fishery, and the town's historical sources make clear the importance of the fishing industry to its economy. In 1285, 23 weirs were recorded in the river and estuary between Colchester and the sea; some were probably used to catch fish, while others might have been associated with the oyster fishery (VCH 1994, *Essex IX*, 238). Eels, flatfish and small fish such as smelt may have all been trapped in this way and, in the medieval deposits at Culver Street, eel were found to be one of the most common species, while flatfish were of less importance (*CAR* 6, 279). Although there was no herring render recorded for Colchester in Domesday (Darby 1977, 286), herring and cod were well represented in the Culver Street medieval deposits. Locker has speculated that a more specialised offshore fishing industry based on netting for herring and line fisheries for cod evolved during the 13th and 14th centuries (*CAR* 6, 279). The detailed tax assessment of 1301 reveals that 17 taxpayers had ownership interests in boats, four of whom owned fishing tackle, and there were a further two fishermen without boats (Britnell 1986b, 15). A few cut-marks found on the medieval fish bones at Culver Street provide evidence for fish processing in the vicinity (*CAR* 6, 279) but this was presumably at a domestic level. Oysters were probably sold throughout the period and an oyster stall was recorded in the market in 1337 (VCH 1994, *Essex IX*, 35).

Foreign and internal trade

Some Colchester merchants were also ship owners (Britnell 1986b, 17–19; VCH 1994, *Essex IX*, 31) involved in both import and export through the Hythe, although Colchester did not have a large enough market to support extensive overseas trade. This was compounded by the fact that larger vessels could not reach the port and had to load their goods on to and off smaller boats some distance downstream. The limitations placed on waterborne traffic, combined with an increase in seaborne trade from the second quarter of the 14th century, led to an arrangement whereby goods could be off-loaded from larger ships at Old Heath, where docks for ship-building and maintenance were provided by the borough (Britnell 1986b, 18; VCH 1994, *Essex IX*, 31). Most goods that left the town from the Hythe were transported by ship across the North Sea to France, Germany and the Low Countries, and around the south and east coasts of England as far as Cornwall, Wales and Northumbria (*ibid*, 27). Incoming goods came both directly from foreign ports and by way of other English ports. Unfortunately, the physical evidence for incoming trade does not encompass the range of goods known from documentary sources and even less evidence survives for exports.

Imported foreign pottery discovered in the town appears to have been of little significance to Colchester's economy, but provides evidence for continental trading links in support of the historical sources. Rhenish and Low Countries wares were the dominant foreign wares in early medieval Colchester, as in later periods, and contact with the Low Countries is attested by finds of imported wares such as Andenne ware and Low Countries red earthenwares. There were Flemings among the borough's population by the 13th century (*Close R* 1261–4, 91), and Flemish ships are recorded calling at the Hythe by at least the 1340s (*CAR* 7, 265–6; VCH 1994, *Essex IX*, 31). Imported Pingsdorf-type and Paffrath-type wares from Germany are relatively common finds in the town (*CAR* 7, 276), but would also have come via the Low Countries, presumably in Dutch shipping (*ibid*, 355).

Blocks of Caen stone were brought into Colchester from France in the Norman period to be used for detailed architectural carvings (*CAR* 1, 1). French merchants from Amiens and St Omer were also reported trading in the town in the early 13th century, while a group

of Colchester ship owners and vintners were involved in the importation of wine during the early 1300s (VCH 1994, *Essex IX*, 30). Gascon wine shipped directly to the Hythe was probably the town's most commercially significant import during the period (Britnell 1986b, 19), and several finds of Saintonge ware from Colchester may reflect this trade (*CAR* 7, 258; Walker 2000, 118). Other French wares are rare in the town. Woad was probably imported, as it was readily available from the English possessions in Gascony, and it is a recorded commodity in Colchester during the period (VCH 1994, *Essex IX*, 28).

Contact with Norway is indicated by the finds of widely dated schist hones from the town (*CAR* 5, 76–8; N Crummy 2000, 121). These are thought to belong largely to this period, as their numbers have been shown to escalate during the 12th and 13th centuries in other east-coast towns (Davey and Hodges 1993, 9) and Crummy has suggested that they indicate a medieval trade (*CAR* 5, 77). The ragstone hones were derived from the Eidsborg quarry near Telemark, while those of phyllite came from a source in either Norway or Germany (*ibid*, 77–8).

A local merchant, Adam of Colchester, was recorded at Falmouth in 1226 (VCH 1994, *Essex IX*, 27) and finds of slate roofing tiles, most probably from the south-west of England, have been made in the town (Drury 1982, 348; Brooks 2000, 123). Quarr stone, used in the building of the castle, and several fragments of Purbeck marble mortars discovered in Colchester (*CAR* 5, 40; N Crummy 2000, 122), were probably brought into the town via the Hythe as both are known to have been exported widely by sea (Dunning 1977, 325; Tatton-Brown 1980, 213–15). Grimston ware dated to the 13th and 14th centuries found at the Hythe (Walker 2000, 117) is likely to have reached Colchester via the port of King's Lynn, and merchants from the east coast ports of Norwich, King's Lynn and Yarmouth were recorded trading in Colchester in the late 13th century (VCH 1994, *Essex IX*, 30). Thetford-type ware dating to the 11th century implies trade with Ipswich and perhaps Thetford and Norwich.

Colchester merchants are known to have sold cloth at Boston fair in 1248 and Ipswich in 1249 (*ibid*, 28). Coastal villages to the south-west of Colchester probably supplied the town with wheat (Britnell 1986b, 44) and other agricultural produce, some of which was then presumably shipped on. In 1198 grain was being exported to Flanders and in 1206 oats and other cereal crops were bought at Colchester for shipment to other parts of England (VCH 1994, *Essex IX*, 27). In 1327 wheat destined for Newcastle-upon-Tyne was carried in small boats from the Hythe to the port at Brightlingsea (*ibid*, 238). Colchester also had a small stake in the export of wool and cheeses (Britnell 1986b, 18).

The number of coastal find spots of locally produced Colchester-type ware is also suggestive of coastal trading (*CAR* 7, 177) and Britnell has argued that a comparatively rapid growth of coastal trade through minor market centres was a feature of commercial development in 13th-century Essex (Britnell 1981, 19). The export potential of the local pottery industry appears to have been limited, however, as distributions of these wares are largely restricted to north-east Essex and parts of Suffolk. The late 13th- and 14th-century louters are exceptions to this, and have been found at Chelmsford, Great Easton and possibly Rickmansworth (Herts) (VCH 1994, *Essex IX*, 29; *CAR* 3, 211–14; *CAR* 7, 165). The small quantities of non-local English wares discovered in Colchester indicate that the inland trade of pottery to the town was also a relatively insignificant commercial activity (*ibid*, 354). Pottery 'imports' from the eastern region included Stamford, St Neots and London types, which were being brought into the town in the 11th and 12th centuries. However, the majority of non-local wares brought into Colchester consisted of glazed Essex wares, principally Hedingham wares, from kilns located 24km to the west of the town, and

Mill Green wares from Mill Green, near Ingatestone, in central Essex (ibid, 354). Growing trade along the route between London and Colchester in the 13th century is perhaps indicated by the founding of seven weekly markets along it between 1199 and 1312 (Britnell 1986b, 12).

Pottery industry

Colchester's own post-Roman pottery industry had developed by the second quarter of the 11th century with the production of early medieval sandy ware (*CAR* 7, 40, Fabric 13). The industry continued after the Norman Conquest and was to become the dominant pottery in the town in the late 11th and 12th centuries before finally dying out, or perhaps evolving into medieval grey ware, around 1225 (ibid, 68). The pottery was either hand-made with wheel-thrown rims or hand-made with the whole vessel finished on a wheel or turntable (ibid, 353). It was produced in several vessel forms, of which the primary one was large cooking pots with sagging bases; storage jars, spouted pitchers, bowls, skillets, curfews and jugs were also produced (ibid, 41–7). The early medieval sandy ware potters also produced a 'shell-dusted' ware variant using crushed marine shell.

Evidence for the manufacture of early medieval sandy ware was found in the town's northern suburb of Middleborough during excavations there in 1978, when the remains of at least seven and as many as nine kilns were recovered (MON349–50, MON351, MON360–3, MON365, MON366). The kilns were small single-flue up-draught kilns, horseshoe-shaped in plan and with walls built from clay and reused Roman tile. They were in use between the late 12th and early 13th centuries. Located to the east of the kilns was evidence for a timber structure (MON331) of uncertain plan form, which was interpreted as a potter's workshop (*CAR* 3, 186–9).

During the 13th and 14th centuries the local ceramic industry became dominated by medieval grey ware (Cotter Fabric 20), which probably developed from early medieval sandy ware during the 12th century (*CAR* 7, 91). Two local production sites, at Mile End and Great Horkesley, are known for this pottery. Roadworks at Mile End, two miles to the north of Colchester, led to the discovery in 1973 of pits, postholes, gullies, ditches, kiln furniture and wasters from a late 12th- to early 13th-century pottery (Drury and Petchey 1975, 33–6, 52). Cooking pots, jugs, bowls and other minor vessel forms were produced at the site, which also made louvers and chimney pots, or drain-pipes, that have been located in excavations in Colchester (*CAR* 7, 106). The distribution of grey wares from Mile End is largely restricted to north-east Essex, and Colchester was clearly the main market for its products.

The pottery at Great Horkesley, located 6km north-west of Colchester, is known from waster material recovered from five different locations around the parish (Drury and Petchey 1975, 54–6; *CAR* 7, 109). The ceramics that were produced there included 14th-century medieval grey wares and Colchester-type ware (Cotter Fabric 21A), which first appeared in Colchester c 1200, but did not achieve prominence until the late 14th century, when it replaced medieval grey wares. It began as a tableware industry, dominated by jugs, with a few jars/cooking pots and bowls also in production (*CAR* 7, 113). Louvers were also manufactured and are known from a number of late 13th- and early 14th-century contexts in the town (ibid, 164). Colchester-type ware had a slightly wider distribution than that of medieval grey wares, but remained largely confined to north-east Essex (ibid, 177–8) except for the louvers, for which there appears to have been a wider demand (*CAR* 3, 214).

No documentary references are known for the kilns at Middleborough and there is a dearth of historical evidence for the industry within the walled town and intramural

parishes until the second half of the 14th century. Documentary references to potters in the area around Great Horkesley are known from the late 13th century and indicate the presence of at least half a dozen people involved in the industry by this time. The historical evidence for potters at Mile End is later than the early 13th-century pottery site and relates to a potter called Hugh Pottere of Mile End, who is mentioned in records between *c* 1295 and 1330. Elsewhere, documentary and place-name evidence has been identified in Lexden, Ardleigh and Inworth (*CAR* 7, 364–9).

Cloth industry

Colchester was absent from the list of cloth towns recorded in the Pipe Roll of 1201/2, so its early involvement in the cloth trade is questionable (Gervers 1989, 34). An industry had certainly developed in the town by the second quarter of the 13th century, however, and by 1247 a fulling mill, called Haddel Mill, is recorded (VCH 1994, *Essex IX*, 259). Surnames recorded between *c* 1230 and *c* 1256 included two chaloners, two drapers, three dyers, five fullers and three weavers (*ibid*, 28), and of 167 people recorded in the incomplete tax assessment of 1272/3, a total of 25 were assessed on cloth; six were called weavers, four dyers, three fullers and two carders. An additional three people possessed wool and two had linen (*ibid*, 29). From at least the middle of the 13th century Colchester had a reputation for russet cloth, with Henry III purchasing 20 russet cloths in Colchester in 1249 to clothe his servants, and further quantities in 1252 and 1254 (*ibid*, 28; Reynolds 1977, 50); in the borough's tax assessment of 1301, russet was repeatedly mentioned as a distinct type (Britnell 1986b, 13). However, the cloth trade still appears to have been in its infancy at this stage, with only eight men recorded as weavers, six taxed on fuller's utensils and three on dyestuffs and dyeing vats in the same year. In 1327, the surname Dyer and its equivalents occurs only three times on the tax roll in Colchester, and the surnames Fuller and Webb are absent. By the middle of the 14th century, the manufacture and finishing of cloth was still not the town's primary industry (*ibid*, 14).

The fullers and dyers, who needed water, are documented as working along the Colne between North Bridge and Middle Mill, and at East Bridge, but as yet minimal archaeological evidence for the cloth industry has been recovered from the UAD study area. Fullers held land under the town wall between Ryegate and Northgate in the 1220s; in *c* 1242 a tenterer and a fuller had houses outside North Gate, and in 1328 Edmund le Chaloner sold his tenement beyond North Bridge to a fuller (VCH 1994, *Essex IX*, 40–1). On his death in 1330, a cloth-maker called John Dyer owned at least two houses in East Street and a tenter at East Mill (*ibid*, 40). The tools associated with early medieval spinning and weaving have rarely been found in Colchester, although several spindlewhorls were recovered from Lion Walk (*CAR* 5, 30–2).

Leather industry

Documentary evidence indicates that by the end of the 13th century leather-working was a flourishing local industry. A cobbler and four tanners were recorded in the middle of the 13th century and a cobbler and skinner were present in the town after *c* 1265. The incomplete tax assessment of 1272/3 recorded six people assessed on leather or hides, while a further three shoemakers and two tanners can be identified. Late 13th-century surnames indicate the presence of a cordwainer, two lorimers and four tanners, and the 1296 tax assessment suggests that the leather trades employed almost as many people as the cloth trades (VCH 1994, *Essex IX*, 28–9). In the 1301 tax assessment, the preparation of skins was more prominent than textiles and, according to Britnell, 'has more claim to be

considered the town's main industrial specialisation' (Britnell 1986b, 14). In total, 13 tax payers were described as tanners or occupied tanneries at this time, and a further 17 people were taxed on leather or shoes, or were described as cobblers, providing some indication of the main use to which leather was put (*ibid*). Evidence for the supply of raw materials for the tanning industry comes from the documented cargo of three Colchester merchants which was impounded in Zeeland in 1344 and included 70 quarters (890kg) of crushed bark (VCH 1994, *Essex IX*, 31).

The need for water would have drawn the artisans involved in leather-working to the same areas of the town as the cloth-makers and in *c* 1242 a tanner had houses outside North Gate (*ibid*, 41). Archaeological evidence for the manufacture of leather products has come from three sites located outside the town walls and close to a supply of running water. At Osborne Street, near the town's South Gate and close to Childwell Brook, 300 leather scraps which consisted mainly of triangular off-cuts and narrow strips dated to *c* 1150/75–*c* 1250 were found. These may have been manufacturing waste from a shoemaker's workshop (Shimmin 1994, 46). Small dumps of shoe and clothing fragments dating from the 13th to the 17th centuries were also found (Crummy and Hind 1994, 59). Further evidence for the town's tanning industry comes from the northern suburb of Middleborough, where excavations in 1979 uncovered a medieval bone assemblage dominated by waste bone from cattle and sheep/goat (*CAR* 12, 51). Trial trenching at a site adjacent to North Bridge in 1999 recovered a small assemblage of leather fragments including late 14th-century shoe soles and off-cuts from leather working (Brooks 2004d, 23–31).

Metalworking

A concentration of tap slag discovered during the Lion Walk excavations in robber trenches, and in the 11th-century defensive ditch at Vineyard Street, points to 11th-century ironworking in the town, but no associated structural features were found, and this evidence may belong to the preceding period (*CAR* 3, 91). Tap slag, forging slag and pieces of furnace lining, together with charcoal and burnt daub, were recovered during excavations at Angel Yard, indicating that metalworking took place near the High Street frontage during the 12th or 13th centuries (Shimmin and Carter 1996, 38). The proximity of this activity to the town's main commercial street suggests that it was carried out within a craftsman's workshop attached to a shop. On the west side of North Hill a bronze-casting pit (MON288) discovered on the Gilbert School site gave an archaeo-magnetic date of *c* 1050–1100. On the pit's east side a substantial structure had been built which contained evidence for at least five casting operations. Mould fragments from the site were undiagnostic, but the oven appeared to have been used for casting bells or other large circular vessels, indicating that specialised working of copper alloys was taking place (*CAR* 6, 137–8). 'Brass' pots were frequently recorded in the detailed tax assessments of 1295/6 and 1301, but there is no indication that these were locally produced (Rickword 1906, 155). Two crucible fragments discovered at Lion Walk and the Cups Hotel site may also belong to this period, although an earlier date is possible and they have been discussed in the previous chapter.

The two medieval coin hoards that were deposited in lead canisters beneath properties along the south side of the High Street and were retrieved in 1902 (FND218) and 1969 (FND296) have been speculatively linked to the town's mint (Clarke *et al* 1974, 42–3), although minting is known to have ceased in *c* 1157 (VCH 1994, *Essex IX*, 26–7). Remnants of a third hoard (FND298) were discovered during a watching brief at 22–24 High Street (Brooks 2004a, 78–9). The 1902 hoard of Short Cross pennies was found during building operations at 25 High Street and comprised nearly 11,000 coins ranging in

date from Henry I to Henry III, including some contemporary Scottish and German sterling (Grueber 1903, 111–76). The 1969 hoard was found 2.2m to the west of the property boundary of 25 High Street and 6m south of the High Street frontage. It consisted of 14,076 coins of the time of Henry III buried in a lidded lead canister. Part of the hoard, consisting mainly of English Long Cross pennies from mints all around the country, had been buried in 1256. The group included some Anglo-Irish, Scottish and continental issues, as well as a few plated forgeries. This hoard was increased some time between 1268 and 1278 by the addition of 1,916 freshly struck pennies which had originated from the nearest mint, at Bury St Edmunds (Clarke *et al* 1974, 39–61). A third hoard was found a few metres away from the 1969 hoard and consisted of a lead canister and a single 13th-century coin of Henry III (Brooks 2004a, 78–80). The canister had been buried upside down in a small pit.

The canisters were of the type used by those handling large amounts of cash and this, combined with the excellent quality of the coins, points to money-lenders as the likely owners of the hoards. Local Jewish financiers are known to have owned properties along this part of the High Street in the 13th century (Stephenson 1986, 50), and it has been suggested that the coins were the reserves of Jewish bankers who were unable to take their wealth with them when they were expelled from England in 1290 (Archibald and Cook 2001, 94–6).

Other trades, crafts and manufacturing industries

Evidence for other trades, crafts and industries in Colchester is sparse, although late 13th-century surnames indicate the presence of a cutler, a goldsmith, a mustarder, a coalman and a vintner (VCH 1994, *Essex IX*, 29) and the detailed tax returns of 1296 and 1301 list further occupations, including those of brewer, lime merchant, fishmonger, miller, baker and tiler (Rickword 1906, 127–44). Several men had the surname ‘le Verrer’ and, although most were probably just glaziers, in 1300 Robert le Verrer had among his goods a store of wood that might have been used for glass-making (Charleston 1991, 256). A suspected glass-blower’s works recorded by Laver around 1924 at the south-west end of North Hill appears to have been a very small tile kiln (MON566) of 13th- to 14th-century date (Hull 1958, 146). Local finds of relief-decorated tiles suggest that a nascent tile industry may have developed in the town during the 14th century (*CAR* 9, 231–4). In 1311 there was approximately 1 brewer for every 30 people in the town, suggesting high levels of ale production and consumption; however, the brewing and selling of ale was a transient trade in which most brewers would only be involved for a short time (Dyer 1989, 197).

Lime production

The production of lime for building, and presumably also for agricultural purposes, was conducted both inside and outside the town walls using marine mollusc shells, a readily available by-product of the local fishing industry, as raw material. In the early medieval period lime-burning was carried out in a kiln which took the form of a large circular pit 4–5m across (*CAR* 3, 30). At the Gilbert School site a lime kiln 3.4m wide (MON289) was discovered and dated to the 12th–13th centuries; it contained crushed and burnt sea shells, predominantly of cockles but also of oysters and mussels (*CAR* 6, 288–9). Another lime kiln (MON677), of the same size as the Gilbert School kiln, was discovered during trenching in Castle Park (*CAR* 6, 372). Excavations at St Giles’s church revealed a large lime kiln which took the form of a circular pit 4m wide (*CAR* 9, 221), and another lime kiln (MON677) of the same size as the Gilbert School kiln was discovered during trenching in Castle Park

(*CAR* 6, 372). Interestingly, documentary evidence for lime production in association with building works comes from Colchester Castle, where a lime kiln was included in the cost of repairs to the castle bailey wall in 1182–3 (VCH 1994, *Essex* IX, 244). A further four large pit-type kilns were discovered at Lion Walk (*CAR* 3, 87, fig 73).

Smaller lime kilns are known from St Mary's Cottage, Church Walk (*CAR* 6, 980–3); site B at Culver Street (*ibid*, 123; *CAR* 7, 7); and Lion Walk, where nine kilns (MON495–507), using crushed oyster shell as the main ingredient, were recovered (*CAR* 2, 30). The nine Lion Walk kilns formed a multi-phase complex and were of a different type to the larger pit kilns, consisting of a central reducing chamber with two opposing raking-out pits (*CAR* 3, 87–8, fig 77). Re-evaluation of the associated pottery at Lion Walk suggests that the earliest lime production, using the small kilns, began in the 13th century and probably ended in the 14th century (*CAR* 7, 6). Analysis of mortar from the castle showed that it used lime made in two different types of the larger pit kilns: a 'running kiln' (one which is run continuously) and a 'flare kiln' (one which is operated intermittently). The mortar from the Norman chapel had used lime which contained coal impurities, indicating that the former type of kiln had been used, while mortar from the 13th-century barbican had been manufactured in the latter type of kiln and contained no impurities. The evidence from Colchester thus points to a change in kiln design and concomitant increase in the quality of lime during the 13th century (*CAR* 3, 30).

Mills

Although no physical remains of the town's mills are known to have survived, historical sources reveal that Colchester was generally well served by watermills throughout this period. The town's two great religious houses owned most of Colchester's mills, with a single mill at Lexden owned by the lord of the manor. The town's burgesses do not appear to have owned suit to any mills and Colchester's bakers leased watermills from the major landlords. In this way the bakers were able to control their own supply of flour and could profit from the grinding of corn for others (Britnell 1986b, 38). In 1248/9, for example, the widow of Walter Baker confirmed the ownership of Stokes Mill to St John's Abbey (VCH 1994, *Essex* IX, 262–3) and in 1345/6 five bakers leased East Mill, the New Priory Mill and North Mill between them (Britnell 1986b, 38). Towards the middle of the 14th century there was a reduction in the number of grain mills but by this time water-power was also being used for the cloth industry. The establishment of the first windmills in the town towards the beginning of the 14th century indicates that the Colne's capacity as a power source was being fully utilised (VCH 1994, *Essex* IX, 263).

Six watermills were recorded in 1086: three in Colchester, two in Lexden and one in Greenstead. The two in Lexden were Lexden Mill, which belonged to Lexden manor and was on the Colne approximately 1.5km west of the town (Britnell 1986b, 21), and North Mill, which stood on the Colne somewhere to the north-west of North Bridge. The latter was granted to St John's Abbey prior to 1154 (VCH 1994, *Essex* IX, 397). A further watermill situated outside Ryegate, known as Middle Mill, was recorded in c 1101 and may have been omitted from Domesday as it belonged to Colchester Castle. It is likely that it was maintained by the castle into the 14th century (*ibid*, 248). Hull Mill was built in the later 12th century and appears to have replaced the Greenstead Mill (*ibid*, 261–2).

Throughout most of the 13th and 14th centuries there were usually eight watermills in operation within the UAD study area. Five of these were located on the Colne (Lexden Mill, North Mill, Middle Mill, Stokes Mill and East Mill) and three on a small tributary called Bourne stream, to the south-east of the town (Bourne Mill, Cannock Mill and Hull

Mill). The operation of other mills was probably short-lived but included a fulling mill called Haddel Mill, recorded in 1247, and Sebares Mill at the Hythe, recorded in 1332 (ibid, 259). In 1227, Hull Mill was described as the new mill of St Botolph's Priory (ibid, 261) and in the 14th century it was one of three mills owned by the priory, the others being East Mill and Cannock Mill, which were both recorded in 1311. Bourne Mill may have been the un-named mill that was granted to St John's Abbey on its foundation. It was first recorded by name in c 1240 and was rebuilt in c 1326. Stokes Mill, situated at the end of Land Lane, may have been the mill that belonged to St Peter's church in 1066. In c 1225 it belonged to St John's Abbey, but it appears to have gone out of use for grain-milling by the 1330s (Britnell 1986b, 21). North Mill and Middle Mill went out of use as grain mills in the 1340s, perhaps as a result of the Black Death (ibid, 22). Colchester's earliest recorded windmill was noted in 1325 at an unidentified location called Monksdown, while another was recorded at Old Heath in 1341 (VCH 1994, *Essex IX*, 263).

The countryside

Administrative framework

The liberty (the area where royal control was delegated) of Colchester covered around 10,000 acres around the built-up area of the town and included the outlying parishes of Lexden, Greenstead, Mile End, Berechurch and St Giles's, as well as substantial extramural parts of St Botolph's, All Saints, St Mary's-at-the-Walls and St James's, and smaller detached parts of other intramural parishes (VCH 1994, *Essex IX*, 383). There was a total of 16 parishes within the liberty. Part of the river Colne was also included within the liberty, having been granted, or confirmed, to the burgesses by Richard I (ibid, 231), although its western limit was ill-defined. The four wards of the borough had all been recorded by 1272 (ibid, 231).

Significant Domesday landholders included the king, Eudo Dapifer, the bishop of London and Count Eustace of Boulogne. The pattern of lordship that was established during the Norman period was largely maintained throughout the early Middle Ages, with St Botolph's Priory and St John's Abbey coming to hold extensive tracts of the pre-Conquest estates of Greenstead and West Donyland until the Dissolution. Lexden manor was a significant lay estate, and the division of some estates during the period resulted in the creation of several freehold estates, such as the manors of Berechurch, Battleswick, Braiswick and Mile End. Although there is little documentary evidence for manor courts, the abbot of St John's is known to have held a court in Greenstead in the early 13th century and, in 1274 and 1285, he claimed the rights to maintain a gallows and free warren (for rabbits) by charter of Henry III. The gallows presumably stood at the site of Gallows Green on the edge of Parson's Heath (ibid, 387). St Botolph's Priory and the lords of Lexden manor are also known to have enjoyed extensive legal privileges in their lands within the liberty (ibid, 50).

Agriculture

Colchester's market place was the main centre of agricultural trade within a 13km radius of the town (Britnell 1986b, 46), and many of Colchester's most prosperous townspeople would have derived their wealth from agriculture, through the supply of grain, meat, dairy products and other produce to the urban population. Much of the town's supply of foodstuffs would have come from within the liberty itself (ibid, 38). Domesday provides few details of the agricultural life of the borough (Darby 1957, 254), but in 1086 individual

burgesses and other landowners held a total of around 1,304 acres (528ha) of land, most probably in fields to the north, south-west and south-east of the town. As a body, the burgesses held 51 acres (21ha) of meadow, perhaps along the Colne at the Hythe, and 8 perches (0.16ha) of land around the walls, together with 80 acres (32ha) of common, which may have comprised waste land within the walls and along some of the roads leading into the town. In all these places, the borough's ownership of land continued into the 14th century (VCH 1994, *Essex IX*, 40). It is known that the burgesses exercised common rights over much of the liberty, with the common land divided into two types: 'whole-year land' and 'half-year land'. The main 'whole-year' commons comprised detached areas of outlying parishes, especially Mile End. The 'half-year' commons consisted of grazing rights on the borough fields, the ancient fields of the town which lay chiefly within the parishes of the intramural churches to the south-east and south-west of the town (*ibid*, 255).

The field system around Colchester was not of the open-field type, but of the sort found over most of Essex, which, according to Britnell, consisted of 'an unsystematic arrangement of fields large and small, some subdivided, some not, in which holdings were usually made up of compact blocks of land rather than strips' (1988, 159). Ditches and hedges usually bounded individual tenements and some cropmarks around Colchester may relate to these kinds of features. A rectilinear enclosure (MON61) to the north of the river Colne was trenched in 1952 and produced medieval pottery which was dated earlier than 1400 (*CAR 11*, 131).

Documentary records from the late 13th century reveal that the main crop grown around Colchester was oats, with barley and rye also grown in large quantities. It has been estimated that at least 191 households within the liberty in 1301 had grain for sale (Britnell 1986b, 38). Small amounts of peas and beans were also produced, while cattle and sheep were the primary livestock husbanded by the burgesses; the latter were perhaps the more important of the two (VCH 1994, *Essex IX*, 30). This list has been confirmed by environmental sampling at Culver Street, where the range of plant foodstuffs consumed by Colchester's inhabitants included bread wheat, barley, wild and cultivated oats, rye, horse bean and pea supplemented with apple, cherry, bramble, elderberry and hazelnuts (*CAR 6*, table 8.21). Examination of the animal bone from medieval deposits in the town has shown that cattle were of prime importance, with sheep/goat second, although pig held this position at Culver Street (*CAR 12*, 51).

During the early Middle Ages the salt marshes were a significant element in the economy of Colchester and of Essex as a whole. The land and coastal waters provided pasture for sheep and were used for fishing and hunting as well as the production of salt. Although there are no Domesday entries for salt pans in the Colchester Hundred it would seem more likely that Domesday is incomplete than that there was a real absence (Wilkinson and Murphy 1995, 208), and medieval salt-working sites have been tentatively recognised in the district at Langenhoe (Fawn *et al* 1990, 49). Pasture for sheep was a separate and distinct entry in the Essex Domesday and appears to have related to marshland grazing (Darby 1957, 242). Much of the pasture in parts of the liberty further from the town was later organised into dairy farms, or 'wicks', many of which originated as appendages to the large estates (Britnell 1988, 161). Canonswick, in West Donyland, was first recorded in 1160 and belonged to St Botolph's Priory, while the abbey at Bury St Edmunds had St Edmunds wick in Mile End by 1180. Another un-named wick was recorded in 1196. Braiswick in Mile End and Lexden was recorded in 1257/8 and Tubswick in Mile End was recorded in 1296, by which point it was a mixed farm (VCH 1994, *Essex IX*, 405). Five wicks were recorded in the 1301 tax assessment, including Battleswick, in the

south-east of the liberty; Canonswick and either Monkwick or Middlewick, which were granges of St Botolph's Priory and St John's Abbey respectively; Arnoldswick, in Lexden; and another unidentified wick in Donyland (VCH 1994, *Essex IX*, 383). Although they may have originated as pastoral units, they were all mixed farms by the early 14th century.

Landscape management

The evidence of the Feet of Fines between 1290 and 1330 concerning those estates in the liberty whose arable lands amounted to at least 30 acres (12ha) suggests that about 15 per cent of these properties were made up of pasture, meadow and wood. However, Britnell argues that the proportion of uncultivated land in the region must have been higher than this because of extensive common lands within the liberty that were not represented in these examples (Britnell 1986b, 41).

Much of the area to the north of the town was woodland, which was divided into *Cestrewald* (or the borough's wood), to the north-west, and Kingswood Forest, to the north. Like the other royal forests of Essex, Kingswood was probably established in the 12th century and was apparently compartmentalised, producing timber and some wood (Rackham 1980, 104–5). Welshwood, situated to the north-west of the town, was believed to contain 40 acres (16ha) in 1330. Woodland was used for grazing (wood-pasture), fuel and timber, and hunting. In the 13th and 14th centuries the Abbot of St Osyth enclosed groves which were used for producing timber and as wood-pasture (VCH 1994, *Essex IX*, 404–5), while in the parish of Greenstead St John's Abbey enclosed some 220 acres (89ha) of ancient common and planted Sowen Wood before 1242. This survives, now known as Bullock Wood, as one of the earliest examples of a woodland plantation in the country (ibid, 386; Rackham, 1980, 104; Rackham 1986, 154). In 1280 the demesne of Lexden manor included around 150 acres (61ha) of 'park pasture' which had been enclosed by the lord of the manor before 1237 (VCH 1994, *Essex IX*, 396).

As elsewhere in England during the 13th century, much of the woodland around Colchester was cleared to extend the cultivated area of the land. Regular grants of timber were made from Kingswood at this time, and *Cestrewald* was cleared in the 13th century, as was some woodland in Greenstead, to the north of the town, and part of Shrub Wood, on the border with Stanway in the south-west of the liberty. Much of Berechurch, to the south of Colchester, was also wooded during the early Middle Ages, with Farthing Corner, Maypole Green and Friday Wood Green forming remnants of a chain of greens probably cleared from woodland (VCH 1994, *Essex IX*, 414). Evidence of assarting, the clearance of forested land for agriculture, during the 13th century can be found in the farmstead name Shaws (meaning wood or grove) in Mile End, which derived from a holding recorded in 1296 (ibid, 385). Assarting may also have led to the formation of villages such as Rowhedge (rough enclosure), which was recorded for the first time in the early 14th century (VCH 2001, *Essex X*, 187).

Settlement and religious buildings

Few finds dating to the early medieval period have been recorded from Colchester and the surrounding area, but the medieval settlement pattern survives in the main to this day, owing much to the stability of parish church sites. The rural settlement pattern in the area is typical of north Essex, being comprised largely of dispersed hamlets, farmsteads and greens. Parish churches are in most cases sited close to a manorial hall but only in a few cases, such as Wormingford, West Mersea and Easthorpe, are there nucleated settlements where the village developed directly around a hall–church complex. Possible deserted medieval village

sites include the site of the hall–church complex at West Bergholt (Turner 1984, 44); an area close to the ruined church of St Lawrence in East Donyland; the area around the site of St Andrew's Church, Langenhoe, where ridge and furrow is recorded; and the site of St Mary's Church at Layer Breton (Crummy 1975, 34).

Outlying churches within the liberty included St Michael's Church (MON940), which stood on the east side of Mile End Road a mile north of Colchester and was first recorded in 1254, when Mile End detached from St Peter's to become a separate parish (VCH 1994, *Essex IX*, 403). The church appears to have been a simple post-Conquest structure comprised of chancel, aisleless nave, and south porch. Remains of the rubble foundations of the nave, which was about 18ft (5.5m) wide but of indeterminate length (RCHME 1922, 47), survive on the site. St Andrew's Church at Greenstead (MON281) is located on a hill to the east of the river Colne, 1.8km from the town's East Gate. It is recorded in Little Domesday and so is likely to have been an Anglo-Saxon foundation, and parts of the nave can be dated to the 12th century (ibid, 47). Lexden's church of St Leonard's had been established by the early 12th century and stood on the south side of Lexden Street until its demolition in 1820 (VCH 1994, *Essex IX*, 400). St Michael's Church at Berechurch, which was first recorded in 1170 and was rebuilt in the late 15th century (ibid, 416–18), may have been an Anglo-Saxon foundation (*see* previous chapter).

The current state of knowledge

by Philip Crummy

None of the houses mentioned in Domesday have been excavated. Similarly, identification of most of the churches remains uncertain. Only a few of the town's 16 medieval churches (Cutts 1889, 96) can be shown by archaeological or other means to have been as early as Domesday with any certainty: St Peter's, Holy Trinity and St Mary's at Colchester, and St Andrew's at Greenstead. Others, however, such as All Saints, St Nicholas's and St Martin's, are likely to be just as old, and St Botolph's may have been preceded by a late Anglo-Saxon minster (Rodwell and Rodwell 1977, 40–1). Warwick and Kirsty Rodwell fully reviewed the churches of Colchester in the mid-1970s (ibid) and highlighted the importance of St Martin's, arguing that it started as an aisled cruciform (ibid, 29), but the results of a small investigation in 1991 suggested that this may not have been so (CAT archive report, unnumbered). The sites of most of the mills in the Domesday Survey (plus Middle Mill, which was excluded because it was on the king's land) can be identified, but there has been no archaeological excavation at any of them.

The robbing of buried remains has been shown to be a feature largely of the late 11th and 12th centuries (for example, *CAR* 6, 123), and one confined to the built-up areas, where people might dig pits and trenches and accidentally discover buried foundations which they subsequently robbed. Most Roman foundations in the town centre appear to have been robbed, whereas they tend to survive in places where there was no early medieval occupation in the vicinity, such as at Balkerne Lane, outside the walled part of the town (Buildings 52 and 59: *CAR* 3, 124 and 130). However, foundations under medieval streets appear to be unrobbed, thus providing some dating evidence for the post-Roman street system.

Colchester Castle continues to present seemingly intractable problems in relation to the original number of floors and its internal layout. The building is subject to ongoing research and will probably remain so for many years to come. The most recent work (by the author and CAT) has uncovered some hitherto unrecognised structural features of considerable significance. The study is as yet unpublished, but several key conclusions emerge: firstly, the

castle is very unlikely to have been built as originally intended; secondly, in terms of structure, layout and accommodation, Colchester Castle and the Tower of London were even more similar than is generally supposed; and, thirdly, the plan of the castle is likely to have been typologically earlier than that of the Tower of London.

Of the seven stone houses identified in *CAR* 1 (53–70), all appear to be Norman in origin. Five of the buildings were identified as houses, of which one, Building 28 at Lion Walk (*CAR* 3, 75–82), was excavated. This was dated to the 12th century, but it is possible that one or two of the others might be as early as Domesday. There were probably many more stone houses in Norman Colchester (*CAR* 1, 69); Canterbury had at least 30 by the end of the 12th century (Urry 1967, 193). The association of stone houses with Jews in other towns in England (for example, Canterbury, Lincoln and Bury St Edmunds) raises the possibility of Jewish ownership of the early medieval stone houses in Colchester. Certainly Aaron the Jew is recorded as having bought stone houses in St Runwald's parish at some time before 1275 (Rigg and Jenkinson 1905, 235–6), but otherwise no direct connection with Jews can as yet be demonstrated for any of the stone houses identified in Colchester. The large 13th-century coin hoards from the High Street, however, seem highly likely to have been Jewish (Archibald and Cook 2001, 94–6; Brooks 2004a, 84). No evidence was noted of medieval stone foundations on the site of one of the hoards in 2000, but this is not conclusive as the site had been largely destroyed in 1969. The two large hoards were found in adjacent properties, but, given their rarity as finds, the chances are that they had been buried on the same property. The distance between the two hoards suggests that they came from a house which stood lengthways along the High Street rather than end on to it. This would indicate a relatively low density of houses lining the market place, despite this being the commercial heart of the town. The subsequent sub-division of properties into separate houses in the medieval and later periods is well attested in busy parts of Colchester, where frontage space was in demand (VCH 1994, *Essex* IX, 103).

Apart from the limited number of stone houses, almost nothing is known about early medieval houses in Colchester, as earlier upstanding or archaeological remains are very rarely encountered. The mud brick or wattle 12th-century buildings observed in section at St John's Abbey (*CAR* 1, 220–1) might prove to be typical of many early medieval houses in the town. The earliest hall recognised so far is represented by fragmentary remains of an early 14th-century aisled building in the Rose and Crown hotel in East Street (Menuge 1997), and the earliest excavated house, apart from the stone house at Lion Walk, was a very poorly preserved 13th-century building on the Cups Hotel site on the High Street, excavated in 1973 (Building 155, *CAR* 6, 335).

The plan of the eastern half of St Botolph's Priory church has been recovered through excavation and shown to have had a squared-off chancel and a crypt or undercroft under the south crossing. The church also proved to have been constructed on the site of a Roman building, but too little of the latter could be uncovered to determine its plan or function, or if it had been a Roman church (Crummy 2001, 150). Almost nothing is known about the layout and character of the rest of the priory.

St John's Abbey is equally obscure. A drawing of the abbey church survives (Morant 1768, bk II, facing p 140), although it appears to suggest that the conventual buildings were to the north of the church, despite documentary evidence to the contrary (*CAR* 1, 26–30; VCH 1994, *Essex* IX, 303). Excavation there has revealed part of St John's church, an Anglo-Saxon building which pre-dated the abbey (*CAR* 9, 203–18), and, as mentioned above, parts of some mud brick or wattle buildings were revealed in a section in 1973. The latter appear to have been parts of early 12th-century conventual buildings destroyed during

a major fire in 1133 and, as yet, are unique exposures of early medieval domestic-scale buildings in Colchester which were not of stone and brick. The precinct wall was dated 1095–1133 (*CAR* 9, 219–20), although some test pits dug behind the wall in 2002 indicate that parts of the wall, if not all of it, might be significantly later (Brooks 2002b).

Most of St Mary Magdalen's Hospital was excavated in 1989 and 1995 and as a result a full picture of the establishment has been recovered. Although founded in the early 12th century as a leper hospital, no pathological evidence of the disease could be detected in the excavated inhumations. The inmates' accommodation was of the customary dormitory style in a single large building which, in this case, was of two periods. The earliest burials around the first St Mary Magdalen church included a priest with a lead chalice (Crossan 2003, 110).

Of the other monastic and religious institutions, only the House of the Crutched Friars has been explored archaeologically. Part of the church was uncovered in 1988 and again in 2006 (*CAR* 9, 253; Benfield 2007, 21–3), but the work concerned was limited and carried out under restricted circumstances, leaving the layout and development of the friary unclear. Limited investigations at St Helen's have revealed something of the relationship between the Roman theatre and later chapel (Crummy 1982b, 300–1). At least three of the latter's four walls proved to have Roman work as foundations and it may even be possible that parts of the walls themselves are Roman too. None of the other ancient chapels (St Anne's, St Thomas's and St Mary's) survive and nothing is known about their appearance or plan.

There have been no archaeological investigations of the waterfronts at the Hythe, and the development of the port and its quays remains largely unexplored. The original Norman quay is likely to be the 'common quay', which is on the west bank of the river. It starts 37 yards (34m) south of Hythe bridge and is 195 yards (178m) long (VCH 1994, *Essex IX*, 240).

Leather strips and offcuts dated 1150/75–1250 from St Botolph's Street are, as yet, the only possible indicators of shoemaking in Colchester in the early medieval period (Crummy and Hind 1994, 59), and, in general, the material evidence recovered from the ground for the wool, cloth and leather trades is almost non-existent, despite the fact that these trades were important in Colchester in the 13th century (VCH 1994, *Essex IX*, 28). On the other hand, pottery manufacture is hugely over-represented in the archaeological record. This is because pottery vessels are durable, they are made in large numbers and they break down into many fragments. Moreover, the kilns used in their manufacture leave distinctive and substantial remains in the ground for archaeologists to discover. Twelfth-century pottery manufacture is well attested at Colchester by the series of kilns and a possible workshop (Building 74) at Middleborough, just outside the walled part of the town (*CAR* 3, 185, 189; *CAR* 7, 57–67), and later kiln sites have been recorded at Mile End (Drury and Petchey 1976). Otherwise, the only other substantial archaeological evidence for trade or craft activities takes the form of large pits at Lion Walk and elsewhere, where shell was burnt to make lime (*CAR* 3, 86–7).

The study of animal remains is hampered by high levels of Roman material which, being undatable in its own right, cannot easily be excluded from any study. However, bulk sieving has proved especially effective for the recovery of fish bone and has revealed the development of a fishing industry with significant herring fleets in the 13th and 14th centuries, and off-shore fisheries for cod (*CAR* 6, 279). (For further, see P Murphy's summary below.)

Preservation

Preservation of houses is extremely poor. Nothing of their superstructure has been recognised above ground. Unlike their Roman predecessors, the houses of early medieval Colchester shared the same sites as later and modern ones, and as a result much of the buried remains have been lost through the construction of cellars and later foundations. The worst-affected area is the High Street, where uncattered parts of the frontages seem to be exceptionally rare. Low-lying areas where the water is close to the surface produce wooden and leather finds which do not otherwise survive. There are two main low-lying areas which can be identified at present, but there are no doubt others. One is the piece of land between the river Colne and the fifty-foot (15m) contour across North Hill. The other stretches from Osborne Street to the south side of St Botolph's Priory.

Importance

In spite of the presence of a huge keep, and compared with its Roman and late Iron Age predecessors, Colchester between the 11th and 14th centuries was an ordinary town, of modest size and of only limited regional economic importance during this period, and the archaeological remains it possesses are not likely to be significantly different from most of the towns in East Anglia. Although Colchester had been the largest and most important town in Essex over the previous thousand years or so, by the 14th century the usual administrative centre for the county was Chelmsford, founded in the late 12th century by the Bishop of London (VCH 1994, *Essex IX*, 23). The central location of Chelmsford within Essex must have been a key factor favouring Chelmsford, but the relatively modest size of Colchester in the 13th century presumably had a bearing on the relationship between the two places. It was only after the Black Death that Colchester began to expand and prosper.

Continental pottery imports never exceeded 0.5 per cent of the total assemblages (*CAR* 7, 355), revealing limited overseas trade, an inward-looking town and a modest port supporting largely coastal traffic. The castle, of course, is exceptional. Its unique relationship to a Roman temple, its huge size, its affinities with the Tower of London and its as yet unrivalled structural history and development mark it as a building of international merit. Colchester's major monastic houses, St John's Abbey and St Botolph's Priory, are not exceptional nationally, largely because so little survives above ground compared with many monasteries elsewhere. However, being in a former Roman town, one or both of the monasteries may bear a significant relationship to a Roman building, and this would considerably increase their importance. The chancel of St Botolph's church sits on the site of a Roman building and St John's Abbey was the site of a Roman temple (Hull 1958, 240).

The Jewish community, established in the town between 1159 and 1182, seems to have always been relatively small and poor in national terms, ranking 16th among those who contributed to an aid, or royal tax, in 1221. However, some of the individuals making up that community may not have been poor, if, as is thought, the very large 13th-century coin hoards prove to have been Jewish (Archibald and Cook 2001; Brooks *et al* 2004). The value of the properties (namely nine houses and a synagogue) confiscated by the king in 1290, showed that Colchester's Jewish community ranked about seventh in value among the Jewries of England at this time (Cutts 1889, 125).

Potential for future research

Despite the poor preservation, remains of early medieval dwellings are almost certain to survive, and a study of these should provide important information, lacking at present, about the character and development of these early buildings. The castle has a great deal to

reveal as, of course, do the baileys and their defences, the exploration of which was ably started by M R Hull and others (Drury 1982). The buried remains of St John's Abbey and St Botolph's Priory are likely to be well preserved, so that large-scale investigations should reveal much about their plan and development and, possibly, even interesting relationships with much earlier structures. A review of the date of the precinct wall at St John's Abbey may produce a different result for its construction or show the wall to have been of more than one period, and a survey of the course of the wall may reveal more gates, especially one on the south side of the precinct.

The earliest quay at the Hythe would appear to be identifiable and, as work at London has shown (Cowgill *et al* 1987, 1–7; Grew and de Neergaard 1988, 131–6; Egan and Pritchard 1991, 1–12), its excavation could provide important finds in dumped material behind any surviving timberwork. Being waterlogged, parts of the original quay could survive and provide useful details about the construction and carpentry of the quay, as well as opportunities for dendrochronological dating. Moreover, information about the morphological and economic development of the Hythe is likely to be recovered through excavations following on the work of 1994–5 (Brooks 2000) and 1999 (Benfield 2001).

Wood and leather are very under-represented in the archaeological record. Apart from the quays at the Hythe, certain areas in and around the town centre are likely to contain organic materials and also wattle and other structures (such as have been found in Osborne Street; Shimmin 1994, 46–9), which relate to industries sited close to water. The sites of the watermills are likely to be particularly important because of the possibility of early preserved timberwork and sequences of pottery and other finds closely datable through the dendrochronological dating of associated timbers.

Colchester medieval deposits: biological remains

by P M Murphy

Biological remains, principally from pits and ovens/kilns, have been analysed or assessed at two main sites: Culver Street (*CAR* 6, 273–87) and Angel Yard (Murphy 1996b). The pit fills typically include charred remains of cereals and pulses, mineral-replaced macrofossils of wild and cultivated fruits, marine mollusc shells (mostly oyster and cockle), mineral-replaced arthropods (fly puparia and woodlice), avian eggshell, notably higher densities of fish bones than in Roman deposits (predominantly eel, herring and cod: *CAR* 6, 278–80), larger faunal remains and phosphatic faecal concretions. These results show that many or most pits were latrine pits, though other waste material was incorporated. The pit fills are entirely typical of well-drained medieval urban sites, and the macrofossil assemblages from them can be paralleled at Ipswich, Norwich and Thetford (Murphy 1997). At Angel Yard, the fills of hearths and ovens produced fuel residues (charcoal of trees, gorse/broom and heather), but no clear indication of function. At the Gilbert School site, cockle and other marine shells dredged from the estuary were used as the raw material for lime production (*CAR* 6, 288–9).

As at all urban sites, there is a problem of residuality and reworking, particularly of large mammal bones, and this is especially severe at Colchester because of the long period of occupation. This may further compound the taphonomic complexity of urban biological assemblages, making them virtually uninterpretable in extreme cases. For example, Anglo-Saxon sunken-featured buildings from Colchester generally contain abundant Roman artefacts (P Crummy, pers comm), so the bone assemblages from them are in most cases unreliable. In view of these problems, it is recommended (Murphy 2000a) that future work

should be targeted on deposits related to discrete short-term events (such as catastrophic fires or floods) that accumulated rapidly and are unlikely to contain residual material; and on deposits that are clearly involved in processes (for example, textile-processing, dyeing, malting, leather-working and bone- or horn-working). For both types of deposit, there is a reasonable prospect of unequivocal interpretation. In addition to these, assessment of more 'typical' deposits (especially waterlogged deposits providing optimum preservation conditions for biological material) needs to continue, though in many cases full analysis will not prove profitable.

11 Late Medieval Colchester, 1349–1540

by David Radford

Introduction and historical framework

The political, religious and economic structures established in the early medieval period continued to shape Colchester until the Dissolution of the Monasteries under Henry VIII. Colchester's fortunes fluctuated with the devastation of the plague and the ebbs and flows of the cloth trade. Indeed, the period of 1350 to 1500 was a period of mixed fortunes for English towns in general and it was the ports, including Colchester, that entered the 16th century in the strongest position. Initially the growth of inland and external trade in 13th-century England seems to have benefited regional towns other than Colchester, which was eclipsed by Ipswich as a regional commercial centre and by the 14th century ranked only 46th in the league table of English provincial towns based on lay subsidy – a tax on moveable property held by the citizens of a town (VCH 1994, *Essex IX*, 23). However, by the mid-16th century Colchester had moved up to ninth position nationally in terms of taxable wealth, with the cloth trade at the heart of this success.

Agriculture and fisheries were staples of the local economy, but it was sea trade that offered the best prospects for commercial growth. The detached settlement of fishermen and seafarers at the Hythe developed an infrastructure of wharves and warehouses that generated income for the borough. The Hythe was allowed to undertake direct sea trade, even though it fell under the customs jurisdiction of the port of Ipswich. Unfortunately the river at the Hythe was not suitable for heavy shipping, and town records testify to numerous attempts made by the borough to improve the channel. However, silting remained a problem and large ships were forced to unload downriver at Wivenhoe; thus Colchester was never able to develop the levels of commercial success seen at regional centres such as Norwich, King's Lynn and Ipswich.

The numerous Flemish names that appear in town records from the 1350s mark an influx of craftsmen and traders from the Low Countries. This initial intake of skilled immigrants helped to invigorate the cloth industry, and Colchester soon developed a European reputation for cloth, trading directly with the Low Countries, Gascony and the Baltic States. The Black Death is recorded for the first time in 1348–9, taking perhaps a third of the population, yet its return in 1360 did not stop the cloth boom. In the late 14th century the town's leather-based industries, tanning and shoemaking, appear to have declined, whereas the cloth industry benefited from the expansion of markets in the Baltic and Gascony. Colchester's speciality, a medium-quality russet woollen cloth, even found its way to the Mediterranean via London merchants. By the late 14th century all five mills along the Colne had been adapted to fulling, and immigrants from across the country were being attracted to Colchester, replacing those lost through plague.

A common feature of towns of this period was antagonism between the burgesses and local landowners over matters of jurisdiction. At Colchester the two principal local landowners, the lord of Lexden manor and the abbot of St John's Abbey, were the main protagonists. For example, in 1350 Lionel de Bradenham, a tenant of the lord of Lexden manor, laid siege to the town for 13 weeks in a failed attempt to wrest greater river rights from the burgesses. Later, in 1398, the abbot was accused of sending armed riders into the town to terrorise the citizens. The court rolls and the Ledger Book of St John's Abbey

continue to chronicle such disputes into the 15th century. For example, in 1489 the burgesses complained that some 400 acres of land which had once been common had been bought up piecemeal by the abbey and their ancient rights were being discarded (Britnell 1986b, 256).

In 1372 the reorganisation of audit, account and election procedures for the town council seems to have heralded a period of prosperity (ibid, 160). The reason for this constitutional reform is unknown. However, other towns, such as Ipswich, had experienced popular unrest at this time which had led to legal reforms, and perhaps Colchester had similar concerns. The impact of the Black Death in England was to drastically reduce the number of labourers and undermine the old feudal manorial system; in 1350 the Statute of Labourers was introduced, which forced pre-plague wage rates on labourers and forbade them to move out of their parishes on pain of having 'F' (Falsity) branded on their foreheads. The growing tensions found expression in the famous Peasants' Revolt of 1381, which was ostensibly an uprising against the imposition of a third poll tax in the previous year but was also rooted in the struggle against bondage and serfdom. Colchester played only a peripheral role in the revolt, although John Ball, one of its leaders, who famously preached 'When Adam dived and Eve span, who then was the gentleman?', may have lived in the town. The other principal leader, Watt Tyler, may have been a native of Colchester (VCH 1994, *Essex IX*, 24–6; Bird 1987, 43–4). Colchester escaped much of the excesses of the uprising, although during the revolt St John's Abbey was attacked and some court rolls were burnt as people sought to evade the poll tax by destroying records of their holdings and tax history (VCH 1994, *Essex IX*, 24–6). The town walls were repaired between 1381 and 1421 partly as a response to the revolt and partly as a precaution against the French, with Richard II visiting in 1381 to review the work.

From the 1390s German Hanseatic merchants dominated Colchester's cloth trade; their activity was at its peak in the mid-15th century, when the town had a number of Hanseatic residents who hired Dutch ships to take cloth from Colchester as far as Russia (VCH 1994, *Essex IX*, 33–4; Britnell 1986b, 173–6). The rapid growth of the town's cloth industry was interrupted by war in Europe in the 1420s, but revived between 1437 and 1449. At this time Colchester's road links with London and Ipswich worked for and against the town, providing access for goods and capital but allowing Hanseatic merchants based at the London Steelyard to dominate the local cloth export industry, siphoning profits out of the town. At this time towns had to manage the growing administrative responsibilities placed on them by the king and also deal with the popular unrest that stemmed from periodic economic downturns. In 1447 a royal charter was presented to the town in an attempt to quiet the disputes between burgesses and local manorial lords. This clarified the boundaries of the jurisdiction of the borough court and represented a successful effort by the wealthier burgesses to protect their interests. Another royal charter of 1463 made the borough a corporation and redefined its government structures. However, not all legal developments in the county worked in Colchester's favour; for example, in 1494 Chelmsford was designated by parliament as the place where the official brass standard weights and measures were to be held, to its considerable commercial advantage.

As the cloth trade developed it came increasingly under the control of craft guilds and wealthier burgesses. The role of the former in quality assurance allowed them to restrict participation in the trade, while the wealthier burgesses were able to diversify into different aspects of the industry: for example, wool purchasing, fulling, finishing and exporting. There was also a general rise in living standards as the survivors of the plague were able to focus agricultural efforts on the more fertile areas of land, and food output remained high.

Towns were becoming more important as the rural population became increasingly dependent on goods produced in urban centres, as opposed to the produce of self-contained estates. The growth of market networks slowly changed feudal society. Some merchant burgesses were becoming stronger through continental trade and other, lesser, traders also began to exert an influence over the rural economy. For example, local butchers could provide financial incentives to local peasants to specialise in certain types of livestock and, by the 15th century, 'every town had its butchers, all of them prosperous, the new men of the pastoral economy and its masters' (Duby 1969, 193). In the late 15th century Colchester's trade with north-west Europe declined, but economic growth continued, with the occasional setback, into the 16th century. In the first half of the 16th century Essex towns, particularly Colchester and Maldon, appear to have suffered an economic downturn as a result of neglect and central taxation. However, on balance, despite recession and population decline, Colchester fared well when compared with many other English towns.

Past work

In the late 19th century local collectors occasionally rescued medieval pottery assemblages from building sites and passed them on to the local museum. Recovery became more systematic during the early 20th century thanks to local enthusiasts like Philip Laver, and medieval pottery was commonly recovered and published with photographs in the Museum Reports (CMR 1908, 18–19, and plate; 1914, 14, plate V; 1929, 44–7, plate X; 1929, 50–2; 1935, 34). However, medieval features were not generally recorded. In the 1950s and 1960s a handful of excavations encountered medieval pottery, but only one major assemblage, from a Stockwell Street rubbish pit, was published (Pit IV; Blake *et al* 1961, 41–3).

With the transformation of the Colchester Excavation Committee into the Colchester Archaeological Trust in 1971, and the prospect of the excavation of large-scale intramural development sites, a conscious decision was made to allocate precious rescue time to post-Roman remains. Subsequent excavations have produced significant, but fragmented, information on the late medieval town. Plots behind principal street frontages have been examined at three locations: Lion Walk 1971–4 (*CAR* 3, 75–8, 82, 84), where rubbish pits, stone and timber buildings and a town wall bastion were recorded; Culver Street 1981–2 and 1984–5 (*CAR* 6, 123–6), where pitted backyards and outbuildings were found; and Long Wyre Street 1979 (*ibid*, 361–4), where rear wings, outhouses and rubbish pits were uncovered. Areas of the High Street frontage have been excavated at the Cups Hotel 1973–4 (*ibid*, 335–6), where stone and timber buildings were located, and Angel Yard 1986 and 1989 (Shimmin and Carter 1996, 42–50, 53–63), where the excavators found late medieval buildings and rear wings, providing insights into the development of the market place. Suburban areas have been examined at Magdalen Street in 1974 (*CAR* 6, 341–4), where a hollow-way, a timber building and wasters from a kiln were located, and Middleborough in 1979 (*CAR* 3, 189–94, 198–201; *CAR* 12, 51), where two medieval halls with central hearths and faunal remains suggested a nearby tanning industry. Waterlogged leather deposits have been recovered from Osborne Street in 1988 (Shimmin 1994, 59), 21 Middleborough in 1998 and 36 North Hill in 2002. Other minor sites include Trinity Street 1977–8 (possible kilns; see *CAR* 6, 828), Blind Knights 1972 (ditch, unpublished) and St Mary's Steps 1972 (postern gate).

The religious precincts remain poorly understood, although there has been small-scale investigation. A watching brief in 1977 and small rescue excavation in 1988 encountered burials and building belonging to the Crutched Friars (*CAR* 9, 245–56). At St John's Abbey part of a medieval cemetery was excavated in 1972, the precinct wall in 1975 (*ibid*, 221–30),

St Giles's church in 1975 and other burials in 1986 (CAT Report 11/86a). At St Botolph's Priory limited trial trenching in 1986 and a small excavation in 1991 examined the nave and south transept of the priory (Crummy 1992b). In addition, St Mary Magdalen's leper hospital was excavated in 1989 and 1995, when the church, hospital buildings and a number of burials were examined (Crossan 2003).

An important regional discovery in 1973 was the group of 14th- to 15th-century kilns at Great Horkesley, which produced coarse wares for the surrounding area (Drury and Petchey 1975). In terms of pottery studies a breakthrough report by Cunningham in 1986 defined medieval 'Colchester ware' for the first time (Cunningham 1982, 365), and in 2000 Cotter produced a comprehensive synthesis of pottery from the town, also bringing together documentary evidence for local kilns (CAR 7).

Excavations and building surveys have provided a picture of building evolution and waste management in the town, as well as limited insights into the development of the High Street, the evolution of the religious institutions and manufacturing and commerce within the town. In contrast, little work has been done to investigate historic hedgerows, field boundaries, farms, moats or manors around Colchester. Among the numerous cropmarks that surround the town, a handful may be of medieval origin (CAR 11, fig 6.1).

The nature of the evidence

Information on this period comes from excavations both inside and outside the town walls, surveys of standing buildings, documentary records and isolated stray finds. Twelve large or medium-sized excavations, along with numerous small excavations and watching briefs, have encountered medieval deposits. These have been, in the most part, rescue excavations with limited budgets and time investigating areas where rebuilding, pitting and robber trenching have denuded and complicated deposits. However, preservation has been better on suburban sites such as the Cattle Market (Middleborough), where there was less pitting and no cellars.

Structures examined include timber town houses and outbuildings, stone cess pits and cellars, churches and domestic/ancillary buildings within the religious precincts. Burials have been excavated in small numbers at the churchyard of St Mary Magdalen and at site of the Crutched Friars in Crouch Street.

At least 96 buildings are dated to this period, of which 44 survive as standing structures. Important surveys were undertaken by the Royal Commission in 1919 (RCHME 1922) and more recently by the Department of the Environment (DoE 1971). A number of detailed structural surveys have been undertaken of buildings in use during this period: examples include the Red Lion (Stenning 1994, 134–59), the Rose and Crown (Menuge 1997, 22–3) and the Portreeve's House (Crummy 1976, 89–103). At least 18 late medieval timber-framed buildings have been surveyed to varying degrees of detail by the Colchester Archaeological Trust, Richard Shackle (Colchester Archaeological Group) and David Stenning (Essex County Council).

Of the principal religious foundations, only the ruins of St Botolph's Priory and St John's Abbey gatehouse and precinct wall still stand. The layout of the friaries, priory and abbey are poorly understood, as are their precincts and outhouses, and these have to date been the subject of only limited excavation. Building stone robbed from these institutions has been integrated into the fabric of the town and can be seen in garden walls, cellars and buildings around the town and suburbs; more, no doubt, waits to be found. The shapes of the precincts have also profoundly influenced the form of the suburbs south of the walls.

Local records survive in some detail from the 14th century onwards, with earlier

references to the town to be found in national archives. The documentary evidence for the town is very rich (VCH 1994, *Essex IX*, xvi–xvii) and has inspired a number of historical surveys (Reid 1914; Martin 1959; Britnell 1982; 1986a; 1990). The nature of Colchester's tradition of self-government necessitated the keeping of detailed records in order to negotiate disputes over debts, contracts, violence and property titles; important sources include the *Oath Book*, the *Red Paper Book* and the town's court rolls. Recently, records relating to 13th- and 14th-century Colchester have come to light in the possession of the London-based Mercers' Company (Britnell nd a).

The finds evidence

by N Crummy

As well as general assemblages, this period has produced a number of well-dated and stratified groups of pottery (*CAR* 7, 322–31). Coins are no more common in this period than in the previous one (*CAR* 4, 68; *CAR* 6, 293; Davies 1996b, 64–6). Other artefacts, again, consist primarily of items reflecting various aspects of daily life (*CAR* 5). A pruning knife and the prongs of a pitchfork found at Culver Street point to agricultural or horticultural activity in the town (ibid, 84). A crucible from Lion Walk was unused and so cannot be attributed to the working of any particular metal (ibid, 87). The importance of cloth manufacture is shown by spindlewhorls of Raeren stoneware and leaden seals (ibid, 30–5). The seals include examples from Colchester and elsewhere found here, within the town, as well as examples from Colchester found in other urban centres, particularly London (Egan 1994, 28–33). A wide range of building materials dates to this period, with a series of relief-decorated floor tiles being of particular interest (*CAR* 3, 81–2; *CAR* 6, 251–61; *CAR* 9, 231–5; Crummy and Hind 1994, 58–9; Crummy 1996b, 81–2). There is considerable documentary evidence, including in the court rolls, for tile kilns in the town and further afield (Jeayes 1921; Britnell 1986b, 241, 253), and for pottery kilns (*CAR* 7, 364–9). Brick was increasingly used from this period onwards (Ryan 1996).

The archaeological evidence

The urban plan

The pattern of development in the late medieval period was influenced by the existing form of the town. The road from London to Ipswich and Harwich was channelled through the High Street, past the moot hall and the market. Ribbon development followed this route to either side of the walled town; to the west travellers could drink in the taverns on Crouch Street while to the east, settlement spread down East Hill and East Street, where travellers would encounter the impressive Rose and Crown Inn, which still stands, itself testimony to the important role of inns and alehouses in the medieval urban economy. The river was important for milling and trade, providing a focus to the north and east of the town. The Hythe, the town's port, encouraged ribbon development along Magdalen Street, which was well paved and well used. The port remained legally part of the town, even though it was separated from it by farmland. South of the town, less affluent suburbs developed around St John's Abbey and St Botolph's Priory.

By the late medieval period the street plan of the town was already established, although some streets remained little more than back lanes where rubbish and waste were dumped (Fig 11.1). In this respect Colchester has the usual characteristics of a medieval town

growing within a Roman wall with a limited number of gates (only four principal ones) and therefore only two through-streets for traffic. Viable trading locations were consequently limited to the main streets, with other areas effectively relegated to the status of back lands, and the resulting fierce competition for High Street plots led to a distinctive pattern of development with narrow plot frontages, building plans to suit, and repeated street encroachments. The minor lanes remained subject to non-intensive uses such as industry, grazing, horticulture, dumping and cottage developments. Similar situations can be seen at Gloucester, where there are extensive central street encroachments, and Chester, where The Rows represent the same phenomenon in a vertical form.

The first documentary references to many of Colchester's streets appear in the 13th and 14th centuries (see *CAR* 1, 79, and unpublished Mercers records discussed by Britnell (nd a)). At present archaeological evidence is too localised to allow us to refine our understanding of Colchester's expansion. The potential is there, however; excavations at St Mary Magdalen's Hospital, for example, have shown that rubbish pits and a hospital building (MON994) appear to have respected the orientation of Simons Lane, suggesting that the latter was established by the 13th century (Crossan 2003, 117).

Much of the intramural zone remained semi-rural in character and barns are recorded in the 15th and 16th centuries near St Helen's Well, in Holy Trinity parish (Benham 1907, fol 165r; *CR* 31/23^d), and near St Peter's church (*CR* 60/2r, 13^d, 21^d). A large part of the north-east corner of the town was taken up with the king's lands around the Castle and the precinct of the Grey Friars, which included meadows, orchards and gardens. In the south-east corner was the ancient Berry Field and in the south-west corner seasonal crops were still grown in the 14th century (Britnell 1986b, 10). The walls also encompassed eight parish churchyards, along with many private gardens and orchards.

Despite the semi-rural character of the town there was fierce competition for space in the market area of the High Street, as described above. Properties on the High Street have characteristically narrow frontages with long narrow rear wings, and are accessed through alleyways that lead into gravelled yards at the rear. A good example of a long narrow gravelled alley between two substantial town houses was noted during excavations at Angel Yard; it was only 1.5m wide and ran for perhaps 35m back from the High Street frontage (see Fig 11.2; Shimmin and Carter 1996, fig 9). Some of these alleys opened onto small courts surrounded by multiple tenements that functioned like miniature housing estates. As the population increased in the later 14th century so the built-up area began to expand down the back streets, notably Maidenburgh Street (VCH 1994, *Essex IX*, 42). In the 1370s 'new rents' were constructed at the west end of the High Street, to the south of St Peter's church, blocking off the church's access to the High Street (ibid, 42). There were houses at the top of Maldon Road in 1349/50 and on Childwell Lane by 1384. North of the town walls, at Middleborough, there is evidence of occupation from the 12th century – for example, a building associated with a local pottery industry (MON74; *CAR* 3, 209) – although denser occupation does not appear to develop until the 14th century, when more substantial buildings appear (for example, MON332 and MON333) and the light-industrial character of the suburb gives way to regular town houses (*CAR* 3, 200–1).

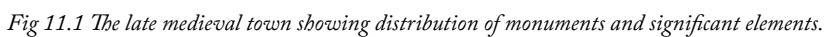


Fig 11.1 The late medieval town showing distribution of monuments and significant elements.

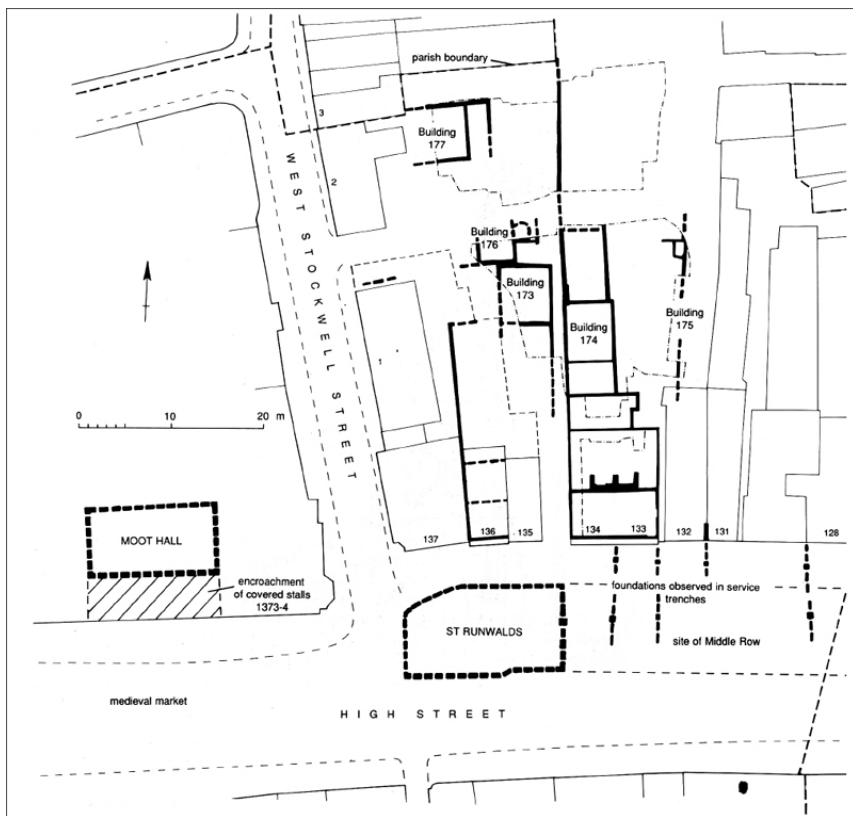


Fig 11.2 The Angel Yard excavation site as it was in the late medieval and post-medieval periods (from ESAH 27, fig 9).

Excavations at Angel Yard (133–136 High Street) have provided evidence for the rapid expansion of buildings backwards from both the High Street and West Stockwell Street frontages in the 14th century; unfortunately, close dating of this process was not recovered (Shimmin and Carter 1996, 35). The pattern of expansion appears to develop largely within the framework laid down when the High Street plots were originally divided up. This plot pattern has been shown by excavation to date at least from the 14th century (*ibid*, 63). The expansion to the rear of MON1063 (CAT Building 174) appears to respect the long 'primary' property boundary along the west side of the building, which can be dated back to at least *c* 1300 (Fig 11.2; *ibid*, 63). The original plot divisions are likely to have taken place as part of a formal act of town planning within the walled town, as Philip Crummy has noted evidence for plots based on modules of four poles (*c* 20m), with 12-pole units, in particular, being detectable north of the High Street (Crummy 1979b, 149–51). These measurements are reflected in significant property and parish boundaries and Shimmin argues that the eight-pole unit can be convincingly subdivided into one two-pole and two three-pole sections (Shimmin and Carter 1996, 63).

Merchants and tradesmen could profit from a position in the market place, using the lower floor of their house or the cellar as a shop/workshop. Based on tithe evidence, the wealthiest parts of the town were the High Street in St Runwald's and St Nicholas's

parishes (the two parishes which dominated the market place) and also East and West Stockwell Streets, which extend into St Martin's parish.

The evolution of the market place in the 14th and 15th centuries is of some interest. The market was held from the western end of the High Street down to St Nicholas's church, with the shambles in the middle, near the moot hall. In the 14th century rents and stalls were built up against the north and south walls of St Runwald's (Benham 1907, 1387/8), and in 1473/4 covered stalls were built in front of the moot hall (Benham 1902, 6–10). A charter of 1321, through which the burgesses acquired the right from Edward II to raise rents from 'waste spaces', may have opened the way for the expansion of stalls into the market place (Britnell 1986b, 116; Shimmin and Carter 1996, 63). Documentary records suggest that there were distinct areas set aside for tanners, fishmongers, grocers, meat stalls and so on. However, the organisation of stalls within these zones may have developed in a haphazard manner.

The encroachment into the market place south of the moot hall in 1373/4 appears to have established the line retained by the modern street frontage west of West Stockwell Street, whereas the line to the east, from Angel Court, appears to maintain the earlier alignment. A number of wall footings which are thought to be post-Roman, but are otherwise undated, have been spotted in service trenches south of Angel Court (Hull 1958, 159; *CAR* 1, 48–50; *CAR* 6, 3/75b; Shimmin and Carter 1996, fig 28; CAT Report 1996/11/b PX). Shimmin suggests that they are footings for covered market stalls, constructed of wattle and daub, which may have been cleared back to the original property frontage when a more formal Middle Row was built east of St Runwald's in the late 15th century, perhaps following the grant of clerkship of the markets to the town bailiffs in 1447 by Henry VI (VCH 1994, *Essex IX*, 270).

East of the market in Friar Street (later High Street) occupation was probably continuous as far as the East Gate by the early 15th century, and the area was more residential in character than it is now. This was the poorer area of the town, judging by the court rolls (Britnell nd b, note 101).

Documentary studies have suggested that the area from East Hill down to the Harwich and Greenstead fork was industrial and plebeian in character, with smithies, leather and textile production and illegal brothels located here (Britnell nd b, note 105; see *CR*, 105; Benham 1907, fol 165^{rv}, 167^v, 106; *CR*, 29/8^d, 13^d; *CR*, 30/15^d; *CR*, 32/15^r; *CR*, 33/16^d, 18^d, 19^d, 107; *CR*, 36/2rd; *CR*, 34/15^r). Access to running water at East Bridge would have made this area more suited to industry. Tile and pottery manufacture are classic suburban/extramural activities in the Middle Ages. The parishes located in the southern part of the town – for example, Holy Trinity and St Mary at the Walls – appear to have been relatively poor. The poorest areas were St John's Street, Vineyard Street (the appointed place for brothels) and Priory Street. Extramural parishes on the eastern route down to the port at the Hythe, such as St Mary Magdalen and St Leonard's, were richer than many of the intramural parishes (Britnell nd b, note 108).

Parochial boundaries appear to have been stable during this period, although there is evidence that ward boundaries were politically more important in the affairs of the town (ibid, note 169). Boundary stones have not been recovered from the town, but a stone cross is mentioned on the road from Colchester in the 14th century (Britnell nd a, charters 1, 2, 8 and 23, for example), perhaps the same as the Pedlars Cross known to have stood at a later date on Maldon Road. Another cross is recorded at the Hythe in the 15th century (*CR* 35/14; *CR* 3 7/3^r).

Public buildings and works

The moot hall (MON974) remained the principal public building in the town throughout the Middle Ages. *The Red Paper Book* records that the building was refurbished in 1373 to make it possible to house the wool market there, providing it with marble steps leading up to a courtroom and administrative centre, with tiled steps leading down into a yard at the back of the building. More steps led from the yard into a whitewashed cellar below the hall which was laid out as a wool market and lit by windows high in the wall. The renovation involved the strengthening of the cellar and the insertion of windows to allow light down (Benham 1902, 6–10). At the same time a porch was added to the southern side of the building and stalls with upper chambers were built on either side (*CAR* 1, 53; Britnell 1986b, 120–1). No trace of this work survives, although the Victoria Tower of the modern town hall contains a bell from the original moot hall dating to c 1400 (RCHME 1922, 54).

Another subterranean room in the moot hall contained the town gaol (Benham 1902, 6–10). In addition to this and the Castle, which served as a county gaol, miscreants might have spent some time in the town pillory, located opposite the moot hall or the town cage. A cage (MON104), which was dismantled in the 19th century, is recorded at the north-east corner of St Runwald's church (VCH 1994, *Essex IX*, 155). Public execution does not appear to have been carried out in the High Street, although in the 13th century St John's Abbey had established gallows and ducking stools in Greenstead (on Gallows Green), at West Donyland and at Bourne Pond (MON264 and MON263; VCH 1994, *Essex IX*, 50), while in the late 14th century the lord of Lexden had a gallows at Lexden (*ibid*, 398).

A grammar school (MON977), founded in the 12th century, was located just inside Head Gate on the west side of Head Street, near to St Mary's churchyard (*ibid*, 352). The school was refounded by Henry VIII in 1539, when it moved to a location in Culver Street, just north of the modern Sainsbury's supermarket. Traces of it remained, including original moulded ceiling beams and joists (RCHME 1922, No. 127), until the last surviving elements were demolished in 1956.

A late 15th-century charter of Edward IV restricted the buying and selling of imported goods to the port at the Hythe, which became a wholesaling centre as well as a place for shipping and storage. The borough owned cranes, weighing machinery and several buildings at the port, including Hythe Mill, which it rebuilt c 1552 (VCH 1994, *Essex IX*, 234), although there is some question as to whether the borough owned suit on the mill (*ibid*, 260). A wharf and anchorage was also maintained at *Wodesende*, Old Heath, where the borough had a shipbuilding and repair dock by agreement with the lord of Wivenhoe in the late 14th century (Britnell 1986b, 18). The location of the Old Heath port has proved elusive; during the medieval period the Colne was straightened and the current course of the river Colne runs far to the north of the original. The scarp north of Cleavelands Farm may run down to the site of the Old Hythe, now lying under the Hythe Marshes.

As mentioned in the previous chapter, the parish at the Hythe may be a late development, as it is compact in shape and the 12th-century church is set well back from the water, probably being located on the edge of the original 12th-century settlement. Expansion led to the development of a back lane and housing behind the church by 1352, although settlement remained confined to the west bank of the Colne. Old prospects of the town show details of wharves and warehouses along the west bank, but, as yet, little archaeological work has been done on the waterfront. In 1994, an unbonded peg tile and septaria wall was noted opposite 26 Hythe Quay, perhaps belonging to a quayside building of 14th-century or later date (CAT Report 12/94a). In the 1990s evaluations examined plots on Hythe Hill (CAT Reports 12/94a and 12/97g) and in 1999 excavations at 64–76

Hythe Hill encountered a cultivated soil horizon, a number of large pits and a post-built earth-fast structure dating to the 12th–14th century (interim report in *Med Archaeol* XLIV (2000): 260).

The burgesses were responsible for maintaining two stone bridges, East Bridge (MON923) and North Bridge (MON922). Nothing of the original bridges survives, although a masonry pier constructed from Roman bricks which may or may not be part of the medieval bridge was observed by William Wire during the construction of a new North Bridge in 1843 (Wire nd, 31.5.1843 and 28.6.1843). The town maintained strict control over river crossings; at the Hythe a footbridge was allowed in 1407, but kept narrow to restrict the movement of goods over the river, although this was eventually replaced with a cart bridge in 1473/4 (VCH 1994, *Essex IX*, 234). Documentary records note the attempts by the town authorities to improve and manage the water channel. However, no archaeological evidence has yet been found for this, although just south of North Bridge a waterlogged post was radiocarbon dated to c 1350–1490, and perhaps belonged to a wharf or revetment (*CAR* 3, 155–209).

Those not in possession of their own wells were able to draw from the public water supply. There were at least five public wells near the market place: Stockwell, St Helen's Well, Trinity Lane and All Saints (*CR*, fol 50/13d; Benham 1907, fol 165^{rv}; *CR*, fol 54/19d; Benham 1907, fol 166^v), as well as the town well known as King Coel's pump (ELM1159), which was located opposite St Peter's Church on the junction of the High Street and North Hill. Most of the wells that have been uncovered within the town appear to be medieval or later; they are usually shallow and lined with stone and tile (*CAR* 3, 26). A number of named wells which were located near springheads – Childwell, Chiswell, Stanwell (ELM1273) and Stockwell – are mentioned in the 14th-century court rolls. There were at least three wells beyond East Gate: a large one on East Hill, one called 'Duddelswell' in East Street and a 'Holiwell', or holy well, situated near St Anne's Chapel on the Harwich Road. In 1536, and possibly for many years before, the water from the Chiswell Spring was brought via a lead and possibly pipes into one or more cisterns or small reservoirs near North Street, just inside the town wall, a system which survived until the 19th century.

Waste disposal systems in the Middle Ages did not compare favourably with their Roman counterparts. Documentary sources record the use of lead guttering to carry away rain water on 14th-century High Street houses (Britnell nd a, charter 46). Behind the properties cruder, clay-lined ditches were used to carry waste into cess pits. However, the back lanes of the town, especially Culver Street and North Street, suffered from piles of litter and excrement in the 14th century. A series of simple pits 1.5m deep which were excavated to the rear of Long Wyre Street may have been early cess pits of 11th- to 14th-century date (*CAR* 6, 361). Later 16th-century urban houses are known to have cess pits lined with septaria, flint, brick and peg tile with floors of compacted daub or peg tile: examples occur at, for instance, at Angel Yard (Shimmin and Carter 1996, 54–6) and Long Wyre Street (*CAR* 6, 364). Other cess pits of this period were built of wood, as, for example, at Angel Yard. Elsewhere on the High Street, stone-lined latrines of 16th-century date have been noted at, for example, the Spendrite site (ibid, 995–7).

The town wall, town gates and castle

The town walls and gates were, at least in theory, maintained for the king by the borough. Despite this, it appears that the wall was mined as a convenient source of building stone in the early medieval period and documentary records show that houses had been allowed to be built up against the wall by the 14th century, which would have undermined its

effectiveness as a fortification (Britnell 1986b, 10). The poor state of the wall in the 14th century led the king to initiate a programme of repairs between *c* 1381–1413, presumably as a reaction to the Peasants' Revolt and as a precaution against the French (VCH 1994, *Essex IX*, 25, 45). Work on the walls was accompanied by the reorganisation of adjacent properties, with at least one structure moved to a new site (Benham 1907, fol 65^v).

The most important improvement to the walls was the addition of a series of eight bastions on the south-east circuit (shown on Speed's map of 1610), of which only four now survive above ground level (Fig 11.3; MON1028–32, MON1034, MON1037). Bastion 8 (MON1037) was excavated at Lion Walk, where it was shown to be contemporary with the refacing of the wall (*CAR* 3, 84–5). Other bastions have also been excavated: Bastion 5 in 1931 (MON1032; Hull 1958, 216–18), Bastion 4 in 1934 (MON1034; *ibid*, 50–1) and Bastion 3 in 1964 (MON1030; Holbert 1965, 44–9), with limited results. Between 1988 and 1992 the Colchester Archaeological Trust undertook a detailed survey of the town wall. This revealed that most of the repair work simply involved refacing, although one section west of Bastion 7 was completely rebuilt. The North Gate and the wall either side may also have been reconstructed at this time, although the rebuild cannot be closely dated. Other possible traces of the 14th-century repairs include an archway recorded behind later brickwork at 48 St Botolph's Street (CAT Report 1/98b), as well as refacing at 43 St John's Street (CAT Report 88/5b), Roberts Pool Club on St John's Street (CAT Report 91/11c), and Lion Walk (*CAR* 3, 84).



Fig 11.3 Bastion 2 in Priory Street is one of a series of external towers added to the town wall to strengthen its south-eastern corner (Philip J Wise).

Besides the four principal gates, there were two *sherde* gates, Ryegate and Scheregate, on the north and south circuit (Fig 10.3). A *sherde* is defined as a small gap not wide enough for wheeled transport. An additional postern gate, which was partially excavated in 1972, was created from an enlarged Roman drain arch at St Mary's at the Walls to provide access

to the top of Balcerne Hill (*CAR* 6, 324–8). Little is known about the medieval gates; documentary records indicate that at least some of them were ornamented by statues paid for by wealthy burgesses. For example, the will of John Ellis, dated 1485, provided for statues of St Helen, St Margaret and St John the Baptist to be placed on East Gate (ERO D/B s R2 fol 187).

The Castle (MON760) remained in royal hands and was run by hereditary constables. In the 14th century it was allowed to fall into a state of decay and there is, to date, no evidence that any substantial alterations or repairs were undertaken in the late medieval period. The building remained in use as one of the county prisons, occasionally hosting trials, including trial by combat, which was last recorded in 1375. However, Colchester was not a major legal centre. Instead this function was fulfilled by Chelmsford which, as the county town, was the seat of the shire court. The entrance to the castle bailey was guarded by a gatehouse, named on some maps as the ‘Dunbarr Gate’ (MON820). The gate is shown on Speed’s map of 1610 and on a manuscript dated to c 1709, and was located somewhere in the vicinity of Museum Street (Drury 1982, 403, pl XLII). Excavations in Museum Street in 1986 revealed masonry blocks that may have been remnants of the gate or a bridge abutment leading to the gate. One masonry ‘block’ was of reused Roman tile and septaria set in a yellowish mortar, and had a number of well-defined faces, suggesting perhaps the jambs of a gate or door (CAT Report 6/86a).

Manufacturing and trade

Colchester was a significant late medieval market town that possessed communities of clothiers, potters, tilers, tanners, millers, brewers and fishermen, among others. Documentary sources suggest that manufacturing took place north and east of the walled town, as well as in the intramural area, with High Street shops doubling as workshops.

Pottery and tile production

Possible kiln sites in and near the town include Magdalen Street, where a number of wasters were recorded (CMR 1908, 18–19; *CAR* 7, 110), and 1–5 Trinity Street, where a pit containing 14th- to 15th-century pottery was perhaps a stoke hole pit related to a nearby kilns (MON1045–7; *CAR* 6, 828). However, Cotter notes that two 18th-century ‘flower pot’ wasters were associated with these latter kilns, and so they may not be medieval at all (*CAR* 7, 10). The export market for Colchester pottery was regional, although imports were received from much further afield. For example, the *Oath Book* notes imports of Rhenish stoneware during the reign of Richard II (1377–99), and stoneware sherds were recovered during the Lion Walk excavations in association with the town wall repairs of c 1382–1421 (*CAR* 3, 84).

Away from the town, kiln sites have been recorded at Great Horkesley (Drury and Petchey 1975; *CAR* 7, 109–10), East Donyland (*CAR* 7, 368) and perhaps Langenhoe (CAT Report 7/92c), and there is documentary evidence for pottery production at Mile End (*CAR* 7, 365). The Mile End and Great Horkesley kilns supplied local and regional markets with grey ware cooking pots in the 14th century, although the uniform nature of the pottery makes it hard to link to particular kilns. This type of ware was displaced in the later 14th and 15th centuries by both metal cooking vessels, used in growing numbers, and smaller ‘Colchester type’ tableware (Cunningham 1982, 363–7).

The pottery assemblages for sites excavated between 1971 and 1985 have been examined by Cotter, who also lists the documentary evidence for kilns. The key assemblages are from a pit from Lion Walk containing Colchester-type ware c 1425–75 (*CAR* 3, fig 60, sheet 2a;

CAR 7, 325), a pit from Lion Walk with probable dining refuse dating to *c* 1475–1525 (*CAR* 3, fig 61, sheet 2b; *CAR* 7, 325), pottery from a deep brick- and stone-lined latrine pit dated *c* 1500–25 excavated at the Spendrite Site on the High Street (*CAR* 3, 190; *CAR* 7, 328), a large pit containing pottery dated to *c* 1525 from Culver Street (*CAR* 3, 328), and a stone and brick cellar at Culver Street with pottery dating to *c* 1525–50 (*CAR* 6, 125, figs 3.9 and 3.72). The other published pottery reports for this period are for Stockwell Street (Blake *et al* 1961), the Castle (Cunningham 1982), St John's Abbey (Cunningham in *CAR* 9, 218, 108–34), Crouch Street (*CAR* 9, 255–6), 79 Hythe Hill (Walker 2000, 116–19), and Long Wyre Street (Walker 2001, 43).

Documentary evidence suggests that medieval tile kilns and clay workings were located in the eastern suburbs as far as Greenstead. Kilns are recorded at Dilbridge (VCH 1994, *Essex* IX, 387; *CAR* 7, 365), Lexden, Mile End, Ardleigh and Wivenhoe (*ibid*, 364–5, 367–8; Britnell 1986b, 241). The court rolls also refer to tilers and kilns located at the east end of the High Street and at the top of East Hill (*CAR* 6, 261; *CAR* 7, 366). Interestingly, a problem with local kilns producing non-standardised tiles led the borough to establish a standard template to be kept in the moot hall; unfortunately the measurements of this are not recorded (Benham 1902, 1424/5). Examples of Colchester ware tiles are known from Culver Street Site W (*CAR* 6, 260–1) and Long Wyre Street (CM 1929.25). English-made tiles of Flemish design, both glazed and plain, were popular in the 15th and 16th centuries and have been recovered from the nave of St Giles's church (*CAR* 9, 231) and the floor of a building (MON492) at Lion Walk (*CAR* 3, 80–1), but it is not known whether these were locally produced. Lead-glazed tiles decorated in relief were also popular and have been recorded in four churches around the town: St Giles's (*CAR* 9, 231–4), St Mary Magdalen's (CAT Report 7/89b), St Mary at the Walls (Ward Perkins 1937, 148, 152) and St Botolph's Priory (CAT Report 1/91a). It has suggested that these date to the 14th or 15th centuries and were locally manufactured (*CAR* 9, 231–4).

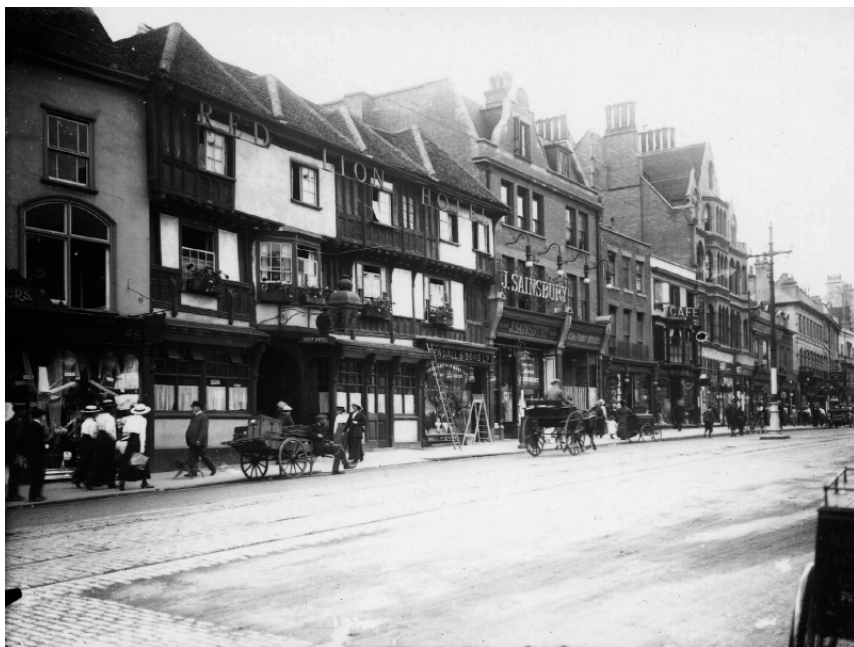


Fig 11.4 The Red Lion Hotel dates to 1515. It is probably the most significant surviving timber-framed building in Colchester (Colchester Museums).

Brewing and inns

The quantity of brewing cisterns dating to the 16th and 17th centuries recovered from intramural rubbish pits drops significantly from the number recovered from the 15th and 16th centuries. This could reflect a decline in the practice of home brewing in the town and the spread of large-scale brewing establishments from the 15th century onwards, a trade with significant Dutch involvement (Britnell 1986b, 197; *CAR* 7, 203). The early inns may have developed from people's houses rather than being purpose-built (VCH 1994, *Essex IX*, 44; Stenning 1994, 158). Certainly there was a tradition of drinking in private houses, which the borough increasingly sought to regulate. Drinking became more popular in the later 14th and 15th centuries as standards of living rose; local records show barley malt replaces oats as the principal component for brewing, reflecting a refinement of tastes (Britnell 1986b, 144). The earliest recorded inns date to the 15th century: of these the Bull Hotel (MON1043), the Red Lion (Fig 11.4; MON34) and the George Hotel (MON112) remain, although considerably altered. The majority of the early inns were focused on the High Street and most of these were situated in the area of the market, the exceptions being the Bull and the Saracen's Head, located in Crouch Street. In the 16th century inns spread along Head Street and elsewhere.

A timber-framed building (MON642) excavated at the Cups Hotel site in 1973 may have been part of the 15th-century Falcon Inn (*CAR* 6, 336–8). Another large High Street inn, the Red Lion, (MON34) is well preserved and has been surveyed in detail during refurbishment (Stenning 1994). To the south, at Lion Walk, finds have included a 15th- or 16th-century brass spigot tap, perhaps from a nearby inn (*CAR* 5, fig 44), while the northern part of the Culver Street site produced a large number of drinking vessels and cisterns (for brewing) from waste pits dating to the 15th century. One pit on Culver Street Site E contained a ceramic industrial base which may be part of a distilling unit, and a piece of glass flask or urinal (*CAR* 7, 7). Also from Culver Street, a large pit which contained pottery dated to c 1525, also included fragments of glass alembics and a ceramic base from an industrial distillation unit, although this could have belonged to an apothecary (ibid, 328).

Mills and cloth manufacturing

In the 14th century there were eight watermills operating around the town. Five were spread along the river Colne (Lexden Mill (MON912), North Mill (MON914), Middle Mill (MON915), Stokes Mill (MON913) and East Mill (MON916)), while three were located on a small tributary south of the Colne (Bourne Mill (MON265), Cannock Mill (MON1050) and Hull Mill (MON1049)). Late in the 14th century a ninth mill was built at the Hythe and, all together, these installations placed considerable strain on the water flow. This was overcome by raising the level of the millponds higher and higher, and 15th-century records note the periodic flooding caused by overflow from these ponds. One of the ponds, formed by a large artificial embankment, survives at Bourne Mill (MON261). The mills on the river Colne and Bourne brook were engaged in either corn grinding or fulling and sometimes both; there was some fluidity in usage, with conversions from grinding to fulling and *vice versa*. Other apparently short-lived fulling mills are recorded in the 14th century – for example, Sebares Mill at the Hythe and Cruddle Mill near East Mill (VCH 1994, *Essex IX*, 259). Apart from the documentary references to fulling, there is little

evidence for cloth manufacturing from this period. Objects used in the manufacturing or working of textiles include some 15th- or 16th-century spindlewhorls of Raeren ware from Lion Walk, some 16th-century Nuremberg thimbles from Middleborough and some single disc lead cloth seals that may also date to this period, again from Middleborough (*CAR* 5, 30–5).

Windmills were also used for the grinding of corn. Documentary sources refer to several, but no structural remains are known from this period. A mill mound was recorded in Monksdown in 1325 and an old mill mound at Old Heath in 1341. Three windmills belonging to the burgesses are documented in 1372, and others are recorded in Head Ward, perhaps near Lexden Road, in 1451 and at Mill Fields, near Harwich Road, in 1542 (*VCH* 1994, *Essex* IX, 263).

Other evidence for food production

Organic remains from Culver Street Site G included medieval deposits of free-threshing wheat, rye, barley and oats, as well as horse bean, grape, mulberry, apple, cherry, bramble and elder (*CAR* 12, 141). Bone assemblages show that medieval sheep were slaughtered at an advanced age, a policy compatible with the importance of wool to the economy. Cow bones become more prevalent over time, with roe deer and goats also noted. A vertebra of a bottle-nosed dolphin was found in a pit at Lion Walk Site C dated 1475–1525 (*CAR* 12, 98). Whales and porpoises, which were high-status food in the Middle Ages, may well have been found stranded on the coastline (Gardiner 1997, 173, 183). Traces of a peg-tile oven of c 1300–1500 found in building 174 were similar to others found in Colchester; it was probably used for baking (Shimmin and Carter 1996, 46; *CAR* 3, 194).

Evidence for tanning

Documentary records suggest that tanners' stalls selling hides were located close to St Runwald's church in the 14th and 15th centuries and that the East Hill area may have contained a concentration of tanners, leatherworkers and blacksmiths in the medieval period (Britnell nd a, charter 34). The limited archaeological evidence points to leather-working at Lion Walk; a large sub-rectangular clay-lined pit with two adjacent postholes contained 15th-century pottery and may have been used in the fulling or tanning processes (*CAR* 3, fig 61, sheet 2b (mislabelled) pit LF142, *CAR* 7, 323). In addition, a large quantity of medieval animal bone was excavated at Middleborough in 1979, suggesting the presence of a tanning industry nearby (*CAR* 12, 51). Further investigations at 21 Middleborough in 1999 recovered a large quantity of leather pieces, including shoe soles of late 14th-century date, offcuts from leather-working and an unusual piece of leather consisting of two straps held together by a thong (Crummy 1999, 23–31). Leather shoe fragments have also been found south of the town walls in Osborne Street, along with a leather jerkin of 14th- to 16th-century date, although the excavator concluded that these were casual losses rather than debris from a workshop (Shimmin 1994, 59). Other leather goods preserved in organic deposits have been found at 36 North Hill, where a test pit recovered three leather shoe soles of probable 15th- or 16th-century date (Orr 2002b).

Other activities

Lime production for agricultural purposes was carried out at intramural sites and it appears that, locally, lime was made by heating oyster shells. By the 14th century Colchester's lime kilns had become smaller and more efficient. Nine small kilns are known from site L at Lion Walk (MON499–507; *CAR* 3, 87–91). Other possible kilns were noted in 1982 at St

Mary's Cottage, Church Street (MON747; *CAR* 6, 980–3), and in 1983 at Castle Park (MON677; *CAR* 6, 372). Traces of leadworking were recovered on the site of St Mary Magdalen's Hospital (*see* p 274).

Domestic and commercial architecture

by Dave Stenning

Unfortunately, any attempt to consider the medieval timber buildings of Colchester is hampered by the partial nature of the surviving evidence and by the absence of any truly thorough survey of its buildings, with work generally limited to the ad hoc examination of individual structures during demolition or alteration. For a town of its size, Colchester has relatively few late medieval buildings, as an analysis of the listed buildings shows. The statutory lists cannot be regarded as presenting an accurate picture of the surviving resource, nor even as being authoritative about those buildings they describe, but they are the best assessment to hand. The only other survey is the early 20th-century one by the Royal Commission on Historical Monuments, which does provide some useful information and photographs, particularly of lost buildings, but suffers from the limited understanding of that time. In Table 6, the listed buildings at Colchester are compared with those at Saffron Walden. Today, the latter has one of the county's best-preserved historic town centres. It was also probably the second late medieval town in the county after Colchester, yet the area within the town enclosure known as the Battle Ditches, which conspicuously failed to be built up, was at most only about 62 acres (25ha), little more than half the size of Colchester. In other words, the preservation of Colchester's historic centre is far from complete. The spatial distribution of the listed buildings is also significant. There are concentrations of listed buildings in East Street, East Hill and at the Hythe, on the commercial fringes of the town and in extramural suburban areas (which have been included in the figures in table 6). The continual redevelopment of the High Street and other central areas will have led to the loss of the grandest late medieval buildings.

Documentary evidence for late medieval housing in Colchester presents a picture of sub-division of plots from at least the 14th century, and probably much earlier, with increasing complexity of layout by the 15th (VCH 1994, *Essex IX*, 41–6). More substantial properties had gateways and seem to have been laid out with courtyards. Some had 'poys' or penthouses attached to them, which would have functioned as shops or stalls. Of particular interest is a reference to the borough leasing plots 18ft (5.5m) wide in Maidenburgh in the 1330s (*ibid*, 42). The narrowness of these implies that they were intended to be occupied by a plan form adapted to urban conditions. This might have been a cross-wing alone, or a tiny hall and attached cross-wing, or a two-bay long-wall jetty house.

As is usual in Essex, building types generally conform to the rural pattern, extending along the frontage rather than being developed in depth. Unsurprisingly, however, urban density did affect building design and layout, and urban functions, together with restricted sites, led to the design and construction of specific urban house types which have their own special interest and fascination. Indeed, the majority of surviving buildings show some evidence of adaptation to urban circumstances. It has to be remembered, however, that these are relatively late buildings, which were the successors to previous ones on sites which had become more complex in the way they were developed as one building succeeded another. This is reflected in, for instance, the high survival rate of the two-storeyed cross-wing, which was more readily adaptable than the lower open hall, thereby possibly giving a misleading impression of the plan form of the late medieval housing in the town.

The compact plan form with an undershot cross-passage in the cross-wing was one common solution to the cramped circumstances of urban plots. Some cross-wings were houses or buildings in their own right, adapted to the constraints of urban conditions (for example, Bonners, Long Wyre Street; MON193). At 3 West Stockwell Street (MON40), there is an example of an apparently contemporary double cross-wing. Another way of exploiting limited space in the town centre was to double up the hall with a parallel range, or double-pile layout, as at 11–15 North Hill (MON129).

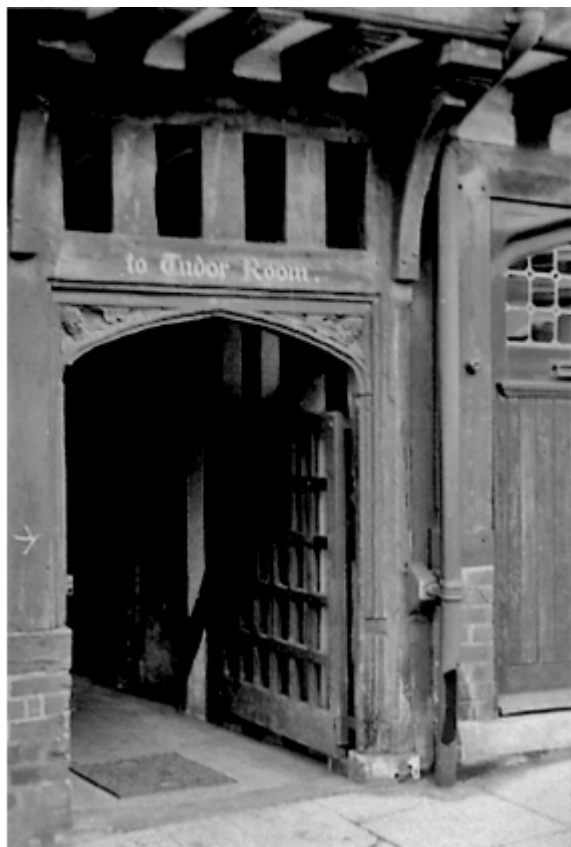


Fig 11.5 The Marquis of Granby on North Hill, built in the 1520s, has a surviving rear door with carved spandrels (Colchester Museums).



Fig 11.6 The east wing of the Marquis of Granby has a main ceiling beam resting on brackets with very well-carved male figures dating to c 1525 (Colchester Museums).

The large number of shops so far detected is unsurprising, as is their widespread distribution. Their elevations follow a fairly standard pattern, with up to two arched shop windows, the older ones divided by a post, either in the gable or flank elevation. The interiors are less predictable and, partly as a result of later remodelling, are more difficult to reconstruct. Of particular interest is 5–7 West Stockwell Street (MON164), referred to as a wool hall in an old deed and possibly designed to be a workshop.

As in other Essex settlements, there were numerous rear wings, frequently jettied along one side (for example, 13–15 North Hill; MON129). These could lead to complex courtyard-type plans, for which there is evidence in the documentary sources.

Building types which probably represent a response to urban conditions are the Wealden

house and the long-wall jetty. The Wealden house is especially effective when combined in semi-detached pairs or terraces. Only one probable Wealden has been recognised in Colchester (Bay House, West Stockwell Street; MON160); doubtless others existed. At Maldon, pairs of Wealdens seem to constitute speculative development for rent (Andrews and Stenning 1996, 223–4). A comparable pair of buildings, two hall and cross-wing houses, probably exists at 98 Hythe Hill (MON13); the suburban location would have been ripe for speculative development. The long-wall jetty building was possibly the dominant type in Bradford Street, Bocking, in the 16th century. At Colchester, there were several on North Hill by the early 16th century including the *Marquis of Granby*; they became commoner later in the 16th and in the 17th centuries. While most houses were of one or two storeys, three three-storeyed buildings survive on the High Street; it would appear that the 16th century saw an increase in height on the most commercially valuable frontages.

In general, Colchester carpentry belongs to the widespread vernacular of north and central Essex and southern Suffolk. Town carpentry tends to be a little more varied than rural, with occasional exotic elements drawn from further afield (Figs 11.5 and 11.6). Arch bracing (as opposed to the more usual down bracing) occasionally appears, perhaps from the Ipswich area, and the wealth of the textile industry provided its own special flavour. The use of posts without jowls is a particularly feature of Colchester's medieval carpentry. Whether this was an archaism or the product of other factors (such as difficulty in obtaining timbers big enough to have jowls) remains an interesting conundrum. 'Colchester', or 'stud to stud' bracing, where the wall braces are attached to secondary members rather than the main posts or girths, is another local phenomenon. Neither of these features is strictly limited to the town, and their presence in the hinterland is suggestive of the geographical spread of local distinctiveness. The one known instance of a medieval queen-post roof (7 Trinity Street; MON196) suggests links with Suffolk, where such roofs were relatively common, whereas in Essex they are almost unknown.

The only timber structure successfully dated by dendrochronology in Colchester is the roof of St Martin's church (MON324). Other buildings which have been assessed for tree-ring dating – the Rose and Crown (MON277), 13–15 North Hill (MON129) and Brown and Sons, East Street (MON65–6) – have been rejected because the timbers lacked sufficient rings. This suggests that, like other Essex towns, Colchester's timber came from intensively managed woodlands which were under pressure to maintain an adequate supply to the town. Only high-status buildings, or the wealthier houses, are likely to prove datable, an unfortunate limitation on the potential of the surviving buildings to provide insights into the town's economic fortunes at different times.

Cellars and undercrofts

A number of stone-built cellars or undercrofts are recorded in the High Street and Head Street (RCHME 1922, 54–60). The dating of these cellars is complicated by the fact that many of the surviving rubble walls have been whitewashed and subjected to later alterations. Reused Roman rubble was used for 17th-century cellars, as, for example, at 136 High Street (Shimmin and Carter 1996, 27; MON39). However, the bulk of the stone cellars probably date from the 14th and 15th centuries. The distribution pattern of recorded rubble walls coincides neatly with the location of the market, which stretched from the junction with Head Gate up to St Nicholas's church in the early 15th century. Some of the undercrofts and cellars preserve traces of blocked-off steps leading to the High Street and may have been leased as workspaces or shops, perhaps independent of the property above, a pattern common to a number of medieval towns (Faulkner 1966, 124). The cellar at 35–37 High

Street (MON31) is particularly interesting in this regard as it has a north-facing rubble wall incorporating a moulded door arch set back some 4m from the High Street frontage (Fig 10.8). A stone cellar of 13th- to 15th-century date was excavated at 44–48 Head Street (MON609); this comprised walls of roughly coursed ragstone and peg tile with pointed head niches (*CAR* 6, 125–6). The cellars of the Red Lion Hotel (MON34) on the High Street are also noteworthy. Those under the front range are of brick, tile and rubble and contain doors and ‘window’ openings with jambs of worked limestone; these are not closely dated but may pre-date the early 16th-century range above (Stenning 1994, 151–4; RCHME 1922, 56). The 15th-century rear range has brick cellars (Stenning 1994, 140).

The religious foundations and charitable institutions

Given the local importance of St John’s Abbey as an institution, relatively little archaeological evidence has been recovered from its heyday. A chance find worth mentioning is the personal seal of Simon de Blyton (abbot of the abbey from 1349–53), which shows the arms of the abbey (CMR 1947, 31). The abbey (MON376) remained the most important religious institution in the town until 1538, when its 13-acre (5.3ha) walled precinct was sold to John Dudley, Earl of Warwick. The remains of the medieval precinct buildings were badly damaged in the 1648 siege and subsequent demolition work must have been thorough, as by Morant’s time little trace of the abbey church or cloisters remained. Little is known about the layout of the abbey, although Morant’s volume contains a drawing of the church (Fig 10.4; Morant 1768, bk II, facing p 140). A 19th-century map by Cutts shows the location of wall foundations, which Rex Hull was inclined to interpret as parts of the domestic wing of the abbey. This view was reinforced by his observations of turf or cropmarks on the site (Cutts 1889, folio facing 34; Hull 1958, 295). A watching brief in 1986, during an extension to the Officers Club within the precinct, observed a substantial wall footing which was potentially part of the abbey church (Crummy 1987, 5).



Fig 11.7 St John's Abbey gatehouse was built as a tangible expression of the power and prestige of the abbey during the 15th century (Tony Nichols).

Stretches of the 13th-century precinct wall (MON369) survive, incorporating 16th-century and later repairs (Sparrow 1943, 67–70). Documentary records suggest that St

John's Abbey strengthened its defences after the 1381 revolt (VCH 1994, *Essex IX*, 25), but these works have yet to be detected archaeologically. Excavations at St Giles's church in 1975 and at St Botolph's Circus (roundabout) in 1972 examined significant stretches of the wall. The latter investigation uncovered 40m of the original face, found well preserved under the later skin and complete with the original putlog holes (*CAR 9*, 221–30). The fine 15th-century abbey gatehouse (MON343) also survives, although it was heavily restored after the siege in 1648 and again in the 19th century (Fig 11.7; RCHME 1922, 47–8).

Excavations within the abbey precinct in 1971 encountered a small number of inhumations from a late medieval cemetery (MON695; *CAR 9*, 203; *CAR 1*, 41). Burials have been observed elsewhere in the Pinnacle Garden (Wire nd, 26.1.1843) and a watching brief in 1986 encountered several graves north of the wall to St Giles's churchyard, perhaps part of the monks' burial ground (CAT Report 11/86a). Excavations in 1975 investigated the foundations of St Giles's church (MON342), which originally stood within the abbey precinct (*CAR 9*, 221–3). Late in the 14th century a northern aisle was added to the church. This was found to overlie several earlier burials, indicating that the earlier church had been tightly surrounded by monastic burials (*CAR 1*, 41). Again in the late 14th century a tower was added to the west end of the church and the precinct wall may have been redirected to the south, placing St Giles outside the precinct in order to allow parochial access. This hypothesis is based on the similarity between the stonework of the precinct wall and that of the church tower (Cater 1919, 218).

St Botolph's Priory (MON364), located east of St Botolph's Street, was partially demolished at the Dissolution, although the nave of the church was preserved and converted for use as a parochial church. The surviving church ruins date to the 12th century, with 13th- and 14th-century windows inserted into the aisle walls. The Royal Commission survey recorded painted mason's lines on the plaster, which is also probably of 14th-century date. The priory's domestic buildings were located south of the nave, where the base of the north arcade wall of the cloister is recorded (RCHME 1922, 48–50). In 1991, a selective investigation to the east of the nave located the south transept and square eastern end of the priory church (Crossan 1992, 103). The graveyard of the later Victorian parish church no doubt incorporates elements of the priory precinct, but the surviving walls are later. A thick rubble wall incorporated into 37 St Botolph's Street may be part of the entrance or gateway to the priory (RCHME 1922, 50). A scale drawing by Major Bale dated 1898 shows a stretch of precinct wall 1m thick, surviving as part of the boundary between 37 St Botolph's Street and the building to the north (CM, *Bale Collect T42*).

The House of Grey Friars or the Friars Minor (MON975), located in the north-east corner of the town, also survived until the Dissolution. Parts of the buildings remained in 1768, but by 1847 these had been demolished (Morant 1768, bk II, 151–2; VCH 1994, *Essex IX*, 306–7); traces of stonework incorporated into the grounds of Grey Friars College may be from the Friary. Documentary sources record the Friary as encompassing a church, cloister, hall, infirmary, kitchen, bakery, brewery, water conduit and two gardens, and Speed's map of 1610 appears to show a gatehouse fronting the High Street. A watching brief at 67 Castle Road in 1997 recorded a large dump of animal bones and domestic rubbish thought to be from the Friary (Brooks 1997c).

The House of the Crouched or Crutched Friars (MON383) originated as a hospital and chapel founded by the lords of Stanway. Its buildings are recorded as the St Cross Hospital and Chapel. Both had apparently fallen on hard times by the beginning of the 15th century, although a reversal in fortunes is suggested by the addition of a new chapel dedicated to St Mary in the early 15th century. At the Dissolution the prior and community granted the

church, churchyard and priory buildings, including stables, barns and dovecotes, to Thomas Audley. These buildings probably occupied the northern end of a triangular plot extending from the west side of Maldon Road to what is now the rear wall of properties on the west side of Wellesley Road. Little is known of the layout, but it is likely that a large east–west building (MON381) excavated in 1988 at 42 Crouch Street was part of the Friary (*CAR* 9, 249–52). Window or door embrasures and a piece of trefoil tracery have been recorded in the gardens of Lexden Road (CAT Report 1/95b), and other pieces of worked stone can be seen in cellars along Crouch Street, although these could be from St Catherine’s hospital (see below) rather than the Friary.

A number of burials and foundations observed in the vicinity of 32–46 Crouch Street probably relate to the friars’ cemetery (MON382). Burials were noted in about 1895 at 38 Crouch Street (Sier 1924, 200–4) and various foundations and burials were noted during work at 42 Crouch Street in 1928 (CMR 1929, 50–2). Two probable medieval burials were observed in stanchion holes at 42 Crouch Street in 1977 (*CAR* 6, 854), and burials of an uncertain date were found in stanchion holes dug for an office block at 32 Crouch Street in 1981 (*ibid*, 975–6). In 1988, a more substantial excavation at 42 Crouch Street recovered 16 poorly dated burials. The intercut graves and the quantities of human bone suggested an intensively used and long-lived cemetery (*CAR* 9, 245–56). The age and sex ratio indicated that the cemetery included local inhabitants as well as inmates, which is consistent with the documentary records that suggest the friary chapel was granted burial rights for local people in 1402 (*ibid*, 248–9).

East of the town stood St Mary Magdalen’s Leper Hospital (MON968), which had originated as a refuge for lepers in the early 12th century. In the mid-13th century the hospital’s main quarters were relocated to a new site in the northern area of its grounds and a new parish church, St Mary Magdalen, was built on part of the hospital’s original infirmary hall. Despite being granted an annual fair by Richard I, the institution appears to have struggled through the Middle Ages and by the Reformation its income was just £11 a year, making it one of the poorest religious houses in Essex (Cooper 2003, 93). An excavation in 1989 uncovered an east–west building approximately 6m across and at least 15m long dated to the 12th to mid-13th century (MON968); it was of unknown function but was perhaps a dormitory or the master’s house. Unfortunately, only a few traces of the flint wall foundation had survived the effects of later grave digging. Fragments of yellow and dark red wall plaster were recovered, along with traces of a possible internal cross wall (Crossan 2003, 98). The eastern part of the structure appears to have been converted into a new building in the 13th century, the function of which is again unclear.

An excavation in 1995, prior to the redevelopment of the site, revealed more buildings to the north of the 1989 excavations. A substantial east–west rectangular building (MON995) was evidently the hospital’s living quarters. Late 13th- or 14th-century painted window glass was recovered from the demolition spread of the building. There was also evidence for a period of industrial use for part of the building. The best-preserved area of clay floor contained a hearth made of peg tile set on edge; west of this was a burnt depression where a charcoal-rich fill lay over fire-discoloured clay and natural sand. The fill contained small flakes of slate, perhaps from a lining or sheet placed over the feature. Nearby were the lower parts of two clay-lined fire pits containing evidence of recurring industrial activity involving molten lead. A second excavated building (MON994) appears to be the ‘Maudlyn chapel’ noted on Speed’s map of 1610 as lying to the north of the parish church. The 1.2m-deep foundations were built largely of reused septaria and Roman tile, and the building had a simple earthen floor and glazed windows decorated with red painted

foliage designs. The outer wall enclosed a floor area of almost 14,550m², which was significantly larger than the earlier hospital church to the south (CAT, forthcoming).

The lack of late medieval pottery from the hospital site could indicate contraction of occupation before the Dissolution, or may represent a decline in the pottery industry at this time. In addition, surprisingly small quantities (given the proximity of the site to the port at the Hythe) of imported pottery vessels were recovered. Slightly more variety in terms of imports was noted at excavations at 79 Hythe Hill (Walker 2000, 118). However, excavations at the Castle have revealed a similar dearth of imported wares (Cunningham 1982, 363–7) and therefore the pattern at St Mary's may not be exceptional (Walker 2003, 140–1). Curiously, no obvious medically related glassware, pottery or instruments were found anywhere on the site (Walker 2003, 140).

In total, 234 graves were examined during the excavations; these represented only a small percentage of the 800-year-old cemetery. Most graves could not be closely dated; a small sample of 12th- to early 13th-century graves was exclusively male, supporting the idea that in its early stages the hospital was an all-male institution. The pattern of burial generally supported the idea that lepers and hospital inmates were buried separately, but close to parochial burials (Crossan 2003, 117).

On the north side of Crouch Street stood another charitable institution, St Catherine's Hospital (MON373), which had been founded by 1352. Part of it had become a house and garden by 1545 and in 1671 the hospital buildings only survived as almshouses, which have subsequently been demolished (VCH 1994, *Essex IX*, 308).

Churches

The parish churches of medieval Colchester were typically small and mostly rubble-built with reused Roman stone. Morant described them as 'mean', with the exception of St Mary's, St Peter's and St James's (Morant 1768, bk II, 105). The growth of the town through the cloth trade did see some embellishment, and spending on the churches seems to have increased in the 15th century, judging by the additions and renovations made at, for example, St Martin's, where the chancel arch was built *c* 1450. Fifteenth-century embellishment was also carried out at St Peter's, All Saints, Holy Trinity, St James's and St Leonard's at the Hythe. A number of monumental brasses from Colchester churches are also of 15th-century date (Christy *et al* 1915, 38–52).

Colchester gained a new parish church in the mid-13th century, when the church of St Mary Magdalen (MON344) was built partly over the foundations of a building of the hospital of the same name (MON968). The church, which is depicted in a small number of 18th-century illustrations that also show a freestanding arch just outside the southern door, was demolished in 1852 (Crossan 2003, 115, fig 17). The 1989 excavations uncovered the nave, chancel and porch of the church, but found no trace of the freestanding arch. The church was small, only 38m² of floor space, and of a simple block design with no clear evidence for a dividing wall between the nave and chancel, although a piece of limestone roll moulding from the demolition deposits could have been part of a chancel arch. Four interments were recovered from the church, one female and three male, all aged between 30 and 50 years. The three males were located in the chancel, suggesting that they were priests. One had a pewter chalice placed upright on his chest, a tradition which has parallels in the period 1280 to 1350 (British Museum 1924, 36–9), a date range supported by the 12th- to 14th-century coarse ware pottery recovered from the grave fill. The significance of the female burial is less clear (Crossan 2003, 110).

Notable architectural finds from the church included stonework ranging in date from

the 12th to the 15th centuries. Documentary records indicate that the church contained windows dating to the 14th and 15th centuries (VCH 1994, *Essex IX*, 328). The excavation also recovered 93 pieces of late medieval lead-glazed relief-decorated floor tiles from the demolition layer. The tiles were unusual in that the manufacture involved applying the slip as toning to the relief of the design. The individual designs are paralleled only in Colchester and one of its neighbouring villages, suggesting local manufacture, although a broad date of only the late 14th to the early 16th century can be proposed at present (Crummy 2003, 123).

In addition to the parish churches, the town also sustained a number of chapels. St Anne's Chapel (MON346), located near 39 Harwich Road, was in existence by 1388; this survived as a barn in 1768 but was subsequently demolished, and its location is indicated on the 1878 OS map (Morant 1768, bk II, 152–3). In 1379 there was also a hospital (MON353) associated with the site. This was rebuilt in 1380, possibly by the St Anne's Guild, who collected money that year and who held land near the hospital in the earlier 15th century; both the chapel and guild apparently survived in 1536 but had been dissolved by 1549 (VCH 1994, *Essex IX*, 336). The chapel was also associated with a hermitage and attached to St Anne's holy well (MON908), which was sealed in the early 20th century.

St Helen's Chapel (MON305), which stands on the corner of Maidenburgh Street and St Helen's Lane, is architecturally of the 13th century. The building fell into disuse early in the 14th century, later becoming a chantry until it was suppressed.

The traces of another chapel are on display outside the entrance to Colchester Castle. The foundations of this 13th-century chapel (MON824) were excavated in 1932–3 and found to be sealed by 17th-century demolition debris (Drury 1982, 331–3). Elsewhere, two chapels are documented as having stood on St John's Green. St Mary's Chapel (MON353) was first recorded in 1363, when it had been damaged by flood and fire; it had been demolished by 1581. The other chapel, of St Thomas, (MON354) was recorded before 1238, contradicting the 14th-century tradition that it had been the Jewish council chamber. The chapel presumably survived until the Dissolution; its site was waste ground by 1581 (VCH 1994, *Essex IX*, 338).

Understandably, the intramural cemeteries have not been excavated, although a handful of burials have been recorded. The medieval stone house at Lion Walk (MON492) contained the remains of a baby burial in a shallow grave dated to c 1150–1500 (*CAR 3*, 77), and a wooden coffin burial was recovered from the High Street near the site of St Runwald's (CAT Report 11/96b).

The countryside

The burgesses had common rights over large parts of the liberty, which were divided between whole-year and half-year rights. The whole-year lands were areas of pasture and wood or heath and waste in outlying parts like Mile End. The half-year lands were ancient open fields found close to the town, within the parishes of the intramural churches. Large areas of heath and waste, which were located west and north of the town, were used extensively as pasture with the heather and furze cut for fuel. Environmental sampling of 14th- to 18th-century ovens and hearths from the town houses excavated at Angel Yard demonstrated that, besides tree charcoal, heathland plants such as gorse/broom and heather were used either as kindling or as the main component of the fuel, perhaps originally as charcoal (Murphy 1996b, 82).

The heaths were interspersed with wood-pasture, where livestock was grazed. The north of the town was more heavily forested, although in 1535 the burgesses acquired Kingswood

from Henry VIII and resolved to convert it from common land to privately owned land or severalty (hence the name Severalls), which meant that the occupiers paid rent to the borough as landlord. Arable lands around the town were divided between rye lands to the east and wheat grown to the west, south-west and south. Population loss as a result of the Black Death reduced pressure on common rights over time and the local lords responded by buying up tenements and gradually eroding common privileges.

Little archaeological work has been done in relation to the medieval countryside around Colchester. However, the agrarian landscape, like those of the Lower Thames valley and Essex, is characterised by irregularity, rather than by the coherence of the open-field systems of the east and central midlands. The unsystematic arrangement around Colchester is one of large and small fields, both subdivided and undivided. Holdings are usually made up of compact blocks of land rather than strips and can be delineated by banks, hedges and ditches. The origins of these fields may be ancient; Britnell notices that traces of compact hides within the Liberty of Colchester can be seen in field-name evidence from the early 14th-century borough records (Britnell 1988, 159).

The surviving irregular field patterns around the town correspond to the documentary evidence for a long process of piecemeal enclosure of common lands. Parliamentary enclosure came late, with the 19th-century enclosure of the large areas of heath west of the town. No trace remains of open fields in the borough, although there is a record of ridge and furrow near Langenhoe Hall (Crummy 1975, 34). Some crop-mark patterns near the town may be of medieval origin: these can be seen either side of the Colne. For example, an enclosure known from crop-marks was sectioned by R J M Appleby in 1952 and a large quantity of early medieval pottery was recovered (*CAR* 11, 131, no. 64). A published summary of Mount Bures parish drawing out more details of landscape evolution, in particular the lands associated with 26 ancient dwellings, shows the potential for future work in the borough (McMaster and Evans 1996, 59–63).

The wealthiest lordships were those of the abbot of Colchester, who had his own personal lands or demesnes in West Donyland and Greenstead, and of Lexden Manor. Smaller estates were St Botolph's Priory's lands at Canwick and Greenstead, St Osyth's Abbey's manor at Mile End and the king's castle lands. In the 15th century some other large landholdings, such as Cooks in West Bergholt and Battleswick, became called manors. Three of St Botolph's properties, Canwick, Dilbridge and Shaws, are called manors in the 16th century.

Of the medieval manor-houses Greenstead Hall survived as a farmhouse until its demolition in 1967 and Lexden Manor was probably located at Lexden Lodge Farm, where the current farmhouse is recorded as 16th century in date. The eastern side of the medieval moat (MON862) at Lexden Lodge was widened in the 19th century, but investigation during drainage work in 1992 failed to produce any useful insights (CAT Report 4/92e). At Mile End the hall, also known as Myland Hall, incorporates a 14th-century two-bayed hall with evidence for a cross-passage at the north end. The southern cross-wing is contemporary or slightly later and the central chimney was put in during the 16th century (VCH 1994, *Essex IX*, 404). Also at Mile End was a freehold of Braiswick Farm: the current farmhouse incorporates the hall and eastern parlour range of a late medieval house, which was modified in the 17th century by the addition of an upper floor and chimney to the hall. The manor-house at Monkwick originated as a farmhouse; this was possibly moated and was built by St John's Abbey before 1523 (Gant 1963, 27). Medieval fishponds south of the house survived until the 20th century. A 1717 map of Berechurch (in CM archives) depicts a house, perhaps the manor-house, standing south-west of the church, and

a moat is recorded at Berechurch Hall Road (CAT Report 7/92b).

The current state of knowledge

by Philip Crummy

John Cotter's study of the post-Roman pottery from excavations in Colchester (*CAR 7*) is a major statement about trade and trade patterns in late medieval Colchester. An interesting conclusion from his work is that German or Rhenish stoneware made up 23 per cent of the pottery in use in Colchester in 1450–1550/80, and that most of these vessels were drinking jugs. Another revealing fact is that more stoneware was imported into Colchester via London than to any other port in the later 16th century (*CAR 7*, 354–5). Although the measure ('estimated vessel equivalents') on which the figure is based exaggerates the proportions of small-mouth vessels like these jugs, it does nevertheless emphasise the vital importance of trade with the Rhineland and the Low Countries to Colchester's economic revival following the Black Death.

The town wall was the subject of a detailed survey in 1988–92, although relatively recent repairs and patching made it difficult in places to distinguish medieval from the original work. As far as can be judged, the extensive programme of repairs to the town wall between 1381 and c 1413 (VCH 1994, *Essex IX*, 45) was limited to the south-east part of the wall circuit, where most of the wall was repaired and strengthened with a series of eight semicircular bastions (*CAR 3*, 84–5). Most of the new work seems to have consisted of refacing, although there was at least one section (west of Bastion VII) which was completely rebuilt. The other section of the town wall to be repaired in the late medieval period was to either side of the North Gate, presumably at the same time as the rebuilding of the gate itself. This rebuild cannot be closely dated.

Sufficient houses have been excavated to allow the characterisation of key archaeological features such as mortared footings, clay floors, hearths and ovens. The buildings concerned are Buildings 75–76 (MON332, MON333; *CAR 3*, 189–209), Buildings 197–200 (ELM1243–5, MON3; Benfield 2002, 38–40), and Building 182 (MON22; Brooks 2000, 112–15). The archaeological remains were relatively well preserved because the structures had been constructed in parts of the town where frontages were not at a premium and cellars were comparatively rare.

No pottery kilns have been found for this period despite the ubiquity of Colchester-type ware and the supporting documentary evidence for potters and their kilns (*CAR 7*, 364–7). However, 15th-century pottery wasters indicate one or more kilns in or near Magdalen Street (ibid, 110) and others at Great Horkesley, some distance from the town centre (Drury and Petchey 1976; *CAR 7*, 109–10).

Developments in the manufacture of lime were illustrated at Lion Walk, where a series of lime kilns showed how the old method of burning shell in large pits had been superseded by smaller structures apparently capable of continuous use (*CAR 3*, 87–91). A few finds of local bay traders' tokens, leaden seals and spindlewhorls of Raeren ware provide a very understated indication of the cloth trade's domination of the town (*CAR 5*, 30–5).

Because it is almost impossible to recognise earlier medieval material, the study of ecofacts, such as animal bone and the remains of other foodstuffs, from late medieval and post-medieval deposits needs care in the selection of contexts to be analysed.

Preservation

The preservation of houses from the late medieval period is poor, although parts of a very

small number of houses survive above ground. Most of the buried remains have been lost through the construction of cellars and later foundations. The worst-affected area is the High Street, where frontages without cellars beneath them seem to be exceptionally rare, and little early timber-framing survives. Areas where the ground water is relatively high (notably in the Osborne Street area and the foot of Balkerne Hill/North Hill and St Peter's Street areas) are likely to be conducive to the preservation of leather and wood.

Importance

Colchester remained a port and market town of regional rather than national importance. Rapid expansion after the Black Death was fuelled by the exploitation of overseas markets for cloth and the arrival of a number of Dutch families in the early 1350s (Britnell 1986b, 72). The population boomed, rising from about 3,000 to perhaps over 8,000 by the end of the century. The growth was matched in towns elsewhere, notably at Coventry, Salisbury, York and Norwich, and in small towns nearby, such as Hadleigh and Thaxted, although surrounding villages decayed. Economic expansion eventually peaked around 1406–14. Then followed a period of low growth until, between 1437 and 1449, there was another phase of vigorous industrial revival. Cloth output reached its peak in the 1440s through trade with the Hanseatic League and thereafter started to contract. Later that century, direct trade with north-west Europe declined and merchants in Colchester (as elsewhere) increasingly traded through London. In the late 15th and early 16th centuries Colchester's population was in decline, reflecting the downturn in the cloth trade. Nevertheless, at the time of the lay subsidy in 1524 Colchester was a wealthier town than it had been before the Black Death, and the borough was ranked 12th in terms of taxable wealth and 7th in terms of taxable population among English towns (ibid, 265).

Late medieval Colchester is of regional archaeological significance for its houses, its port, its religious institutions and its pottery assemblages, including the evidence in the latter for coastal and overseas trade. The town ought to be important nationally for buildings and artefacts which reflect the cloth trade in particular, but that potential is yet to be realised. Few towns in the region had town walls, so the repairs and gates are of considerable interest nationally as well as regionally.

Potential for future research

The further excavation and survey of the town wall offers the possibility of clarifying the extent and dates of the repairs of the wall and improving our knowledge of the medieval gates at Scheregate and Ryegate. Excavations of the quays at the Hythe may provide archaeological evidence for trade as well as related organic finds. Similarly, a wider investigative programme at the Hythe is likely to provide information not just on the development of the quays, but also on that of the buildings behind the waterfront and up Hythe Hill as far as and beyond St Leonard's church. House sites available for excavation are likely to be especially important if significant parts of their timber frames are intact. So too will be any which can be associated with Hanseatic or Dutch merchants or industrial or craft industries such as weaving and fulling.

The excavation of Colchester-type ware kilns would be of regional value and would allow further characterisation of Colchester pottery production and its products. A detailed survey of the post-Roman glass from the 1970–85 excavations would provide a useful corpus and reference work for future work in the town comparable to the relevant volumes of the *Colchester Archaeological Reports*. The excavation of sites rich in organic remains is likely to provide evidence for leather and cloth industries of a calibre not available to date.

12 Post-Medieval Colchester, 1540–1700

by David Radford

Introduction and historical framework

In 1534, Henry VIII broke with Rome and proceeded to bind a significant section of the English nobility to his policy by selling them former church lands at favourable prices. His successor Mary led a failed attempt to forcibly reimpose Catholic rule, and in the aftermath the enriched nobles and persecuted Protestants united behind Elizabeth I, who was able to preside over the expansion of English trade and the consolidation of the English Reformation.

In 1539 the abbot of Colchester was one of three abbots executed for opposing the king. However, the Dissolution seems to have been accepted with enthusiasm by the burghers of Colchester; no doubt the centuries of conflict between the town and St John's Abbey informed local feeling. The town had a tradition of religious nonconformity that dated back to the Lollards of the 14th century and, during the reign of Mary, only London and Canterbury saw more people burnt at the stake. Colchester's immigrant and geographical links with the Low Countries fed the nonconformist tradition, although the town never became wholly Protestant in character.

Historians have begun to pay increasing attention to the role of small and medium-sized towns in the development of the British economy (Borsay 1989, 4–11; Clark 1995; Clark 2000, 2; Gerrard 2003, 230), and Colchester is a well-documented example of a relatively successful post-medieval town. In the early 16th century Colchester was ranked in the top 10 English towns in terms of taxable wealth and taxable population. Its importance was largely derived from its role as a port and cloth-producing centre (Harris Sacks and Lynch 2000, 383; VCH 1994, *Essex IX*, 76–7). Evidence from wills suggests that the town was affected by the contraction of the cloth trade in the early 16th century and was hit by a further slump in the 1550s. This fits into a wider pattern of urban depression noted in other centres such as Norwich, Coventry and York (VCH 1994, *Essex IX*, 78). More work needs to be done, however, on what impact the secularisation of the large religious institutions and their assets had on the town's economy. For example, Cooper notes that in the 1550s there was a decisive increase in the numbers purchasing the freedom of the town, bucking the trend of the wider textile depression at this time (*ibid*, 81).

Documentary evidence indicates that the town's economy grew decisively from the 1560s, following the decision to accommodate a new influx of Dutch immigrants. At this time the southern Netherlands were under the control of Philip II of Spain, who was determined to stamp out the Protestantism gaining support among the Dutch urban classes. Colchester's nonconformist sympathies and Henry VIII's break with Rome created a political atmosphere in which skilled Protestant immigrants were welcomed. In 1571, a number of Dutch refugees formed a guild or trade company in the town and this was granted the exclusive right to produce 'bays' (a thick furry cloth) and 'says' (similar but lighter) and other 'new draperies' that were lighter and cheaper than anything else made in England at the time. It was the manufacture and trade of these lightweight cloths that underpinned Colchester's commercial success throughout the next century. One estimate puts the size of the Dutch community in Colchester at around 200 in 1573, a number which rose dramatically to 1,500 in 1622 (out of a population of around 8,000) (Chalklin

2000, 54).

The assimilation of the Dutch community was not seamless, however, the Dutch facing petitions demanding their expulsion in 1580 and 1591 (West 1988, 51–4), but religious sympathy and the economic benefits brought by the immigrants were sufficient to assuage local disquiet. By the end of the 16th century Colchester dominated the regional cloth-making revival, which encompassed the Essex towns of Coggeshall, Braintree, Dedham, Bocking and Halstead. Colchester manufacturers maintained regional domination of the industry by forcing smaller producers to come to Colchester to have their wares sealed for quality. In the Dutch Bay Hall, governors regulated manufacturing and enforced the inspection and sealing of finished cloths. The power of Colchester's Dutch community is demonstrated by the fact that in 1612 the Privy Council granted them the right to trade freely in London. An attempt by native cloth workers to set up the Company of English Cloth Weavers in rivalry to the Dutch craftsmen failed in the face of continued support for the Dutch from the town council and royal estate (Heard 1970, 118–19).

Driven by the cloth trade, Colchester, along with certain other English towns such as Worcester, York and Ipswich, expanded vigorously in the period from 1550 to 1650 before growth tailed off in the late 17th century. Remarkably, this expansion occurred despite the ravages of the plague, which struck the town repeatedly during the years from 1545 to 1679. The outbreak of 1665–6 may have killed up to half of the town's population and was one of the most devastating episodes recorded in England. Other hardships were inflicted by harvest failure, increased taxation, civil unrest and war. Yet, by 1700, Colchester was one of perhaps just over 30 towns outside London that had a population of over 5,000. It remained the largest town in Essex, despite the fact that Chelmsford was the county town, where both the assizes and the county quarter sessions were held.



Fig 12.1 The post-medieval town showing distribution of monuments and significant elements.

The port at the Hythe was central to the town's economic success, with ships also moored at nearby Wivenhoe and Rowhedge. Coastal trade with London was significant, as

were continental trade links with France, the Netherlands, Poland, Germany and, in the 17th century, Spain. Yet Colchester was never the dominant regional port, being sandwiched between Ipswich, to the north (which dominated trade to the east around the Baltic), and London, to the south (which dominated the Mediterranean routes). Colchester's relative importance within the 16th-century economy can be seen by the tonnage of ships from the port in 1571–2. Colchester's 1,005 tons can be compared with 790 tons at Southampton and London's 12,265 tons (Chalklin 2000, 54). Although in 1588 Colchester was required to provide men and a ship to meet the Spanish Armada, it never became a major port in national terms; a survey carried out in the 1590s places Colchester only 14th out of 19 ports surveyed (VCH 1994, *Essex IX*, 85).

A wide variety of trades is noted in the borough records and there was evidently considerable diversification and specialisation, reflecting the town's role as an important regional market and manufacturing centre. Despite the wealth generated by cloth and shipping, the fruits of the town's economic success were not universally enjoyed and wealth became more polarised. In certain quarters of the town there was considerable poverty, which was exacerbated by plague and war and expressed through episodes of social unrest such as a revolt by weavers for better pay in 1675.

In the 17th century radical religious groups were able to build support locally, including the Brownists, Baptists, Quakers and other religious separatists. Another signifier of social strife was the witchcraft trials of the 1640s. Between 1645 and 1647, amidst the chaos of the Civil War and religious turmoil, the Essex-born Witchfinder General Matthew Hopkins passed 250 convictions for witchcraft, leading to perhaps 100 executions, a much higher number than previously seen. The greatest number of convictions in England was made in Essex and Suffolk, with Colchester being a centre of operations for Hopkins. The nearby Tendring district was the area worst affected by his trials.

Chartered towns like Colchester were dependant on the goodwill of the Crown to resolve legal and trade disputes in their favour and were, in return, vulnerable to the imposition of taxation and the exaction of military contributions. In the Elizabethan and early Stuart period Colchester had successfully courted the Privy Council, the royal court and Parliament in defence of its interests. However, from the 1620s, as a result of the fiscal policies of both James I and Charles I, the borough began to court an alliance with county leaders and by extension the opposition leadership in the Long Parliament (Davis 1981, 564). By the outbreak of the Civil War the town was parliamentary in sympathy. This was demonstrated in August 1642 when the precinct of St John's Abbey, then owned by the Royalist Lucas family, was stormed by a violent mob from Colchester after word had spread that Sir John Lucas had assembled cavaliers there and planned to join the king's troops. The mob also desecrated the Lucas family vault in St Giles's church and local Puritan feeling led to religious iconoclasm, including the whitewashing of the Norman wall paintings in Copford church.

On 12 June 1648, a royalist force of some 5,600 men under the command of Lord Goring arrived at Colchester and, after a short skirmish, was let into the town. The next day a pursuing force led by Thomas Fairfax, Lord Fairfax, arrived and commenced a siege, which lasted until 28 August. The siege resulted in the destruction of around 200 houses, the partial destruction of several churches and a great deal of human suffering. In the end the town fell and the Royalist leaders were executed. Historian Ian Archer notes that the subsequent Commonwealth government did not secure the development of more democratic governance in the town; in fact, the town charter was 'remodelled in 1656 to remove direct election of aldermen by burgesses as the freemen had gradually eased out the

victors of 1648' (Archer 2000, 253).

Despite the impact of the siege the town's population trebled between the 1520s and the 1670s, so that by 1674 its population had risen rapidly to about 10,400, which was not far below the immediate pre-1648 level. It should be noted that these figures mask periods of crisis: for example, one estimate puts the town's population as low as 5,000 in 1600 (Harris Sacks and Lynch 2000, 384). Remarkably, in the 1670s the town ranked sixth nationally in terms of numbers of hearths per household, evidently having recovered from the strife of the Civil War, the impact of privateering and the general dislocation caused by England's international campaigns against France after the 1650s (VCH 1994, *Essex IX*, 88; Borsay 1989, 19).

Past work

A note in the journal *Archaeologia* refers to 30 coarse red earthenware bottles found near Colchester in the summer of 1776; this is likely to be one of the earliest references to post-medieval pottery of its kind (King 1779, 230–1). From the 1870s onwards Colchester Museum collected post-medieval pottery groups from building sites across the town, such as the site of the new Town Hall, in 1899, and the Wyre Street Arcade, in 1928 (CMR 1929, 44–5, fig 2 and pl X). The 1928 Museum Annual Report noted the abundance of medieval and post-medieval finds from 'every building site in the town', and that 'the layer containing these relics is often 4–8ft thick' (CMR 1928, 69). More pottery was recovered in the 1930s during work in the Castle Bailey, at Magdalen Street and at Head Street, much of which found its way to the museum (CMR 1935, 32–4), although findspots and contexts were not recorded.

It is fair to say that post-medieval remains were not the principal concern of the early excavations within the town. Civil War material from the Sheepen site (1930–9) was acquired by the museum, but the Civil War gun emplacement on Sheepen Hill was not excavated and published in its own right. Likewise, rubbish pits and cess pits encountered during the excavation of Roman remains never became more than footnotes in reports (for example, Hull 1958, 113). Nevertheless, in the 1950s and 1960s finds continued to make their way into the museum, including pottery from Culver Street (CMR 1950, 26–7, pl VII), North Hill (*ibid.*, 34) and Wyre Street (CMR 1962, 52). Rodwell has stated that 'medieval and post-medieval layers were commonly dug away unceremoniously, in order to reach the interesting deposits. Colchester fared particularly badly in this respect' (Rodwell 1996, 203). However, this may not be an entirely fair description, as significant finds of pottery and clay pipe did find their way into publications. In fact, Gant's observation of a clay-pipe kiln at the Joslins/Tesco site on the High Street was one of the first contributions of its kind to clay-pipe studies (Gant 1960b, 44).

In 1959, during an excavation carried out by Brian Blake to see if the curving nature of Stockwell and West Stockwell Streets reflected the position of a Roman theatre, a large number of rubbish pits containing 14th- to 17th-century pottery and 17th- to 18th-century tobacco pipes were encountered, subsequently to be published (Blake 1959a, 7–9; Blake *et al* 1961, 41–51). A small amount of post-medieval material from other sites in the 1960s also found its way into print (Richardson 1961, 31–2; Dunnnett 1971a, 40–2, 90–1).

With the creation of the Colchester Archaeological Trust in 1971 a conscious decision was made to address the perceived period bias in the archaeological record. Subsequently, a number of large rescue excavations in the 1970s and 80s provided an opportunity to examine land behind the town's principal streets, which encompassed the rear wings and yards of many post-medieval properties. These excavations produced considerable quantities

of post-medieval pottery along with finds reflecting nearby commercial activities. For instance, the Lion Walk site revealed several plots associated with properties on Culver Street and Lion Walk; here, rubbish pits and dumps containing brewing and pharmaceutical vessels were examined along with structural remains from this period, including an earlier stone house that had been extended and floored with Flemish tiles, traces of an almshouse and a timber building probably destroyed in the 1648 siege. And at Middleborough, two earlier buildings occupied throughout this period and a small number of pits were excavated. The massive 4-acre Culver Street site produced rubbish pits, latrines, ancillary buildings and two cellars belonging to Head Street properties. These modest results reflected the fact that the area was largely orchards, gardens and fields at the end of the post-medieval period.

Smaller sites from the 1970s and 1980s produced more post-medieval data. At Long Wyre Street excavations examined the rear wing of a 17th-century house along with stone-lined cess pits (*CAR* 6, 361–5). The Cups Hotel site was on a prime High Street frontage location, which, although heavily disturbed by later cellars, revealed earlier buildings occupied throughout this period (*ibid*, 328). Similar buildings were examined at Angel Yard (Shimmin and Carter 1996, 42–63) and outside the walls at Magdalen Street (*CAR* 6, 341).

During the 1990s, Civil War entrenchments were examined on the Asda site at Turner Rise (P Crummy, pers comm), more back yards were excavated at the Old Post Office site on Head Street (Brooks 2004b) and a number of small excavations and evaluations looked at plots and properties on Hythe Hill, at numbers 117–119, 124–125 (Austin 1998), 64–76 (Benfield 2002) and 79 (Brooks 2000). Elsewhere, evaluations have encountered traces of a wooden drain at St Peter's House (Benfield 1998c) and traces of early brick buildings at the Old Poultry Site (Crossan 1999b) and 40 Osborne Street (Benfield 1999).

The nature of the evidence

Information on this period comes from excavations both inside and outside the town walls, surveys of standing buildings, documentary records, historic maps, stray finds and photographic records (Fig 12.1). The principal map sources are Speed's map of 1610 and the 1648 Siege Map, both of which depict a number of monuments yet to be located archaeologically, including a market cross and numerous siege works. The survival of many standing structures from this period means that building surveys have a great deal to contribute to our understanding of urban development, and there is considerable potential for future work. In 1922, the Royal Commission identified 249 standing buildings in the UAD study area which are believed to pre-date 1715; of these, 167 were still standing in 2002 (Fig 12.2). Furthermore, ongoing survey work has tended to show that the Royal Commission was conservative with its dating and that many properties are older than recorded.



Fig 12.2 The timber-framed building at All Saints Court in Culver Street was recorded by the Royal Commission in 1922, but sadly demolished in 1939 (Colchester Museums).

Summary of finds assemblages

by Nina Crummy

Colchester's post-medieval ceramic assemblage is of local significance, contributing to an understanding of pottery manufacture and supply in Essex and East Anglia. Post-medieval pottery recovered as stray finds is published with occasional photographs in the *Annual Reports of Colchester Museum*, while assemblages for sites excavated from 1971 to 1985 were the subject of *CAR 7*. Small finds from sites excavated in the same period are published in *CAR 5*, and assemblages from 79 Hythe Hill (Walker 2000), St John's Abbey (*CAR 9*, 235 for clay pipes) and Osborne Street (Crummy and Hind 1994) are also in print. As with the previous period, there are many well-dated groups of pottery from this period, including a large assemblage of drug jars and other tin-glazed wares, which chart the shift in imports from the Netherlands to England as the wares were copied here (*CAR 7*, 331–49).

Most of the clay tobacco pipes recovered from the town are of local manufacture. A dated typology has been established and lists of relief initials and other marks, stamps and local makers recorded in documentary sources have been compiled, though the latter all post-date 1700 (*CAR 5*, 47–66). The recovery of two pipe-clay dog figurines from the same mould suggests that they too may have been made locally (*ibid*, 47, fig 53). Statistical work on the tobacco pipes has, however, been limited and the assemblage from the Angel Yard site may be useful for future research of this nature (Crummy and Hind 1996, 80–1).

The small finds include a seal from the manufacture of bay, a cloth introduced c 1570 by Dutch refugees (*CAR 5*, 33–4). The names of many local clothiers are recorded on their copper-alloy trade tokens (Williamson 1889, 215–20; Judson 1987, 54–93; *CAR 4*, 68). An upsurge in mutton consumption can be associated with the keeping of mature sheep for

their wool (*CAR* 12, 51).

The archaeological evidence

The urban plan

Speed's map of 1610 shows that much of the land along the principal intramural street frontages was built up by this time (Fig 12.3). Dense housing is also shown down East Hill, along Magdalen Street and in the southern suburbs around Stanwell Street and St John's Street. However, large areas of open land survived within the town walls behind the street frontages. Extramural housing had developed west of Middleborough, following the wall around its north-west angle, and east of Middleborough a single house on Speed's map may have determined the line of later streets. Few houses are shown built up against the town wall except near North Gate. The map shows that leats supplied water, presumably to fullers, at East Street and North Hill. The remnants of the religious precincts are shown and the main town well, called Stanwell (ELM1273), is marked south of the town.

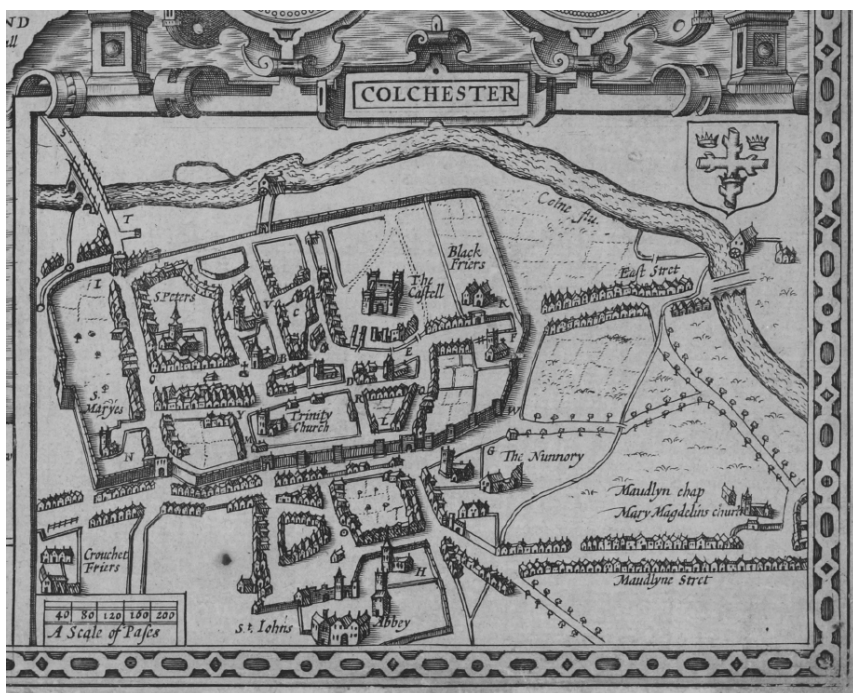


Fig 12.3 Speed's map of 1610 is the earliest accurate depiction of Colchester showing many details which may still be verified today such as the location of the town's churches (Essex Record Office).

The end of the late medieval period was a period of decay for poorer parts of the town, when properties were abandoned or knocked together. However, the economic revival in the later 16th century reversed the process of amalgamation and houses were increasingly subdivided into smaller tenements along the principal street frontages. In the 17th century, records note that agricultural barns near All Saints and along Sir Isaac's Walk were converted into dwellings in an urban forerunner of 20th-century Essex barn conversions.

The pressure on space along the main streets meant that many of the properties along the High Street and North Hill were of three storeys. These urban properties were a mixture of hall houses with rear wings, two-roomed cottages and warehouses placed around a courtyard.

There is some documentary evidence for limited zoning of industrial and craft activities in the town (VCH 1994, *Essex IX*, 104). Sensibly, the mariners lived at the Hythe and the cloth-makers lived east, north and south of the walled town, near the water sources. Many butchers lived in East and West Stockwell Streets near the shambles, where there were slaughter houses until as late as 1580. Most clothiers and bay-makers lived in the parishes of St Peter's or St James's in the 16th and early 17th centuries. The term 'Dutch Quarter', currently used for East and West Stockwell and Maidenburgh Streets, is misleading, as the Dutch community was spread across a number of parishes. Zoning is also apparent in terms of wealth judging by the 1674 hearth tax returns, with St Botolph's and St Giles' being the poorest and St Runwald's by far the most prosperous parish (ibid, 98).

The impact of the Dissolution

St Botolph's Priory was dissolved in 1536, the Crouched and Black Friaries in 1538 and St John's Abbey in 1539. By 1548 only two guilds or chantries remained at Colchester – Haynes's and Barwick's – and these were sold to the borough in 1550, the others having been already dissolved illegally by their patrons (VCH 1994, *Essex IX*, 122).

The Dissolution of the Monasteries led to the acquisition of the religious precincts around the town by wealthy landowners, principally Thomas Audley, Francis Jobson and John Lucas. Audley also successfully lobbied to gain the lands of St Helen's guild and Eleanor's chantry in St Mary's church for the town and these were subsequently used to refound the grammar school (ibid, 121). The precinct of St John's Abbey fell into the hands of the Lucas family, who converted part of the abbey, perhaps the abbot's lodgings, into their house (MON368), as shown on Speed's map and the Siege Map. The creation of elite urban residences on monastic land is paralleled elsewhere; examples include the mansion of Thomas Audley at Holy Trinity Priory, Aldgate, where the domestic range of the prior's lodgings was kept as the core of the house (Schofield 1997, 128). Unfortunately, much of the Lucas house was destroyed during the siege in 1648, when it was used as a Royalist outpost. The remaining buildings were damaged by Dutch prisoners housed there in the 1660s and all traces of the house seemed to have gone by 1768. However, the terraces relating to the formal gardens of the house can still be seen. The precinct wall includes 16th- or 17th-century window openings on its western side, indicating that buildings were erected along the western side of the precinct (Brooks 2002b, 25). The Siege Map also shows what appears to be a south gate of the abbey, of which no remains have been recorded. Several pieces of worked limestone, including a number of capitals with characteristic late 12th-century waterleaf design, were noted in the foundation of the north wall during building work at 2–3 Stanwell Street in 1983, and were likely to have come from St John's Abbey at some point after the Dissolution (*CAR* 6, 373–4).

Elsewhere, the nave of St Botolph's Priory's church was blocked off and used for parochial worship, and an excavation in 1986 revealed that the north wall of the transept had been demolished shortly after the Dissolution (interim note in *Post-Medieval Archaeol* 21 (1987): 267; see EH 'The Preparation of Material for Publication', References to short notes on page 45). The precincts of the Crutched Friars and Black Friars can be still seen on Speed's 1610 map (Fig 12.3).

Schofield notes the potentially liberating process of the Dissolution with respect to town

planning and building design (2003, 322). However, while there is limited evidence for the reorientation of monastic churches towards parochial use (for example, St Botolph's) the Dissolution does not appear to have led to a radical transformation of Colchester's morphology (for example, new planned streets), perhaps because of the location of the precincts in relation to the main axis of the town (the London road and Hythe Hill) and the constraints of the town and abbey walls. Cooper suggests that the impact of the Dissolution was in fact to hasten the decline of the south-eastern suburb around St John's Abbey and St Botolph's Priory (VCH 1994, *Essex IX*, 102). With respect to the potential for the Dissolution to have spurred on developments in secular architecture, evidence is unfortunately lacking, as both the Lucas House in the abbey precinct and Sir Harbottle Grimston's house at Crutched Friars never recovered from the impact of the Civil War (*ibid*, 105).

In the early 16th century some of the parochial churches had been improved: St Giles was remodelled and the towers of All Saints and St Mary at the Walls were rebuilt in *c* 1500 and *c* 1534 (VCH 1994, *Essex IX*, 310, 316 and 326). Vestries were added to St Leonard's and St Peter's in *c* 1534, but subsequently the Reformation appears to have acted as a brake on church additions. The Dissolution saw the redirection of wealth away from Church institutions towards poor assistance. From 1562 the Corporation ordered that alms be collected at every sermon for the relief of the poor, and a number of almshouses were built during this period. Finches Almshouses (MON182) stood in Culver Street from the 16th century to the early 20th century. The Royal Commission surveyed the rebuilt almshouses in 1922 and noted a 17th-century stone tablet recording the foundation of the institution by Ralph Finch in 1552. Winnock's Almshouses (MON215) at 1–6 Military Road were built *c* 1678 and remain a good example of the brickwork of the period. The foundations of an almshouse (MON493) were excavated at Lion Walk and are thought to be the institution constructed by Lady Darcy, which, according to Morant, was built in brick during the reign of Charles I (Morant 1768, bk III, 171). Rubble foundations and daub floors were noted, but the relationship between these was unclear and the floors may have belonged to a later structure (*CAR* 3, 82). In the 17th century the ruinous hospital building of St Mary Magdalen (MON995) was re-established as an almshouse. The medieval building was repaired, enlarged and maintained for a further 200 years until it was finally replaced in the 1830s with a terrace of almshouses that stood until the late 20th century.

The Dutch community founded a church in Colchester in 1563, although the location of the church is unknown until 1677, when it was situated on the corner of Head Street and Church Street (unpublished note by Blaxill, CM archives). The building was burnt down in 1835. A note by William Wire in his copy of Morant's *History of Colchester* states that:

The (Dutch) congregation had a chapel and house for the Minister in Head Street, the wooden framework of the front and other parts of which were sent from Holland, cut and made ready to put together. It was a handsome building of considerable extent. The front of what appears to have been the chapel forms one side of a quadrangular court, occupied by the minister's house and various offices and outbuildings. On the window frame in the front towards the street, the date 1677 appears, and a cipher including the letters S.R.B., with the same date, is impressed on the brickwork of other parts of the building. In the interior is a staircase of oak, ornamented with carvings of superior style and workmanship.

Public buildings and other works

No major alterations are documented for the moot hall (MON974) during this period, although it was joined by other important civic structures on the High Street. At the west

end of the street was the corn market, part of the row of properties built south of St Peter's church. This land was acquired by the borough and became known as the Red Row. The corn market was repaired by the borough in the 1620s and by 1631 the rooms above the Red Row were known as the Dutch Bay Hall (MON967), where the Dutch community was allowed to regulate the quality of cloth production. The hall became important enough to be recognised by an act of Parliament in 1660 (Clarke 1942–5, 375–8). In 1698 the structure was 'a long building like stalls'; it survived until 1819 (VCH 1994, *Essex IX*, 107).

West of St Runwald's a market cross (MON50) replaced the medieval butter market around 1590. It is shown on Speed's map with an open ground floor and a room above. This building was demolished in 1803. The butchers' shambles east of St Runwald's known as the Middle Row (MON49) was rebuilt in the 1580s as a substantial two-storey structure, which survived until 1857. In the late 17th century the town council decided to clear the market place and let it to the highest bidder. One of the subsequent developments was the construction of a specially built fish market east of St Runwald's church in 1697, which survived until at least 1803 (VCH 1994, *Essex IX*, 271).

As well as being responsible for the Poor House, built in 1570 (*ibid*, 90), the town corporation was also responsible for managing the impact of the plague. Records note that it built two pesthouses: one in St Mary's Parish and one at Mile End (Doolittle 1972, 141). In 1665 the *Oath Book* records that corpse bearers were made to live separately and carry white wands. The bearers swore to carry the corpses 'to the ground', which has traditionally been identified with the 'Mount' at Mersea Road. The Mount is a substantial, elongated earth mound in the south-east corner of the St John's Abbey precinct. Human bone was found here in 1867; however, a connection with the plague is unproven (*CAR 1*, 46, note 9; Crummy 2002d, 27).

Water management remained an important issue for hygiene, cloth production, fishing and trade. In 1536 aldermen attached to a guild based at St Peter's church were given permission to channel water from the Chiswell Meadow into the mansion of Henry Webbe in North Street; the resulting channel appears on Speed's map of 1610. Around 1620 a more adventurous scheme was attempted by a syndicate of businessmen who built a town water house (MON1038) in Chiswell Meadow, from which water was pumped to a cistern in the area of Papillon Road (Phillips 1985, 8). In 1633 the Lucas family, who owned the Lords Land, cut the pipes and stopped the flow. The pipes were cut off again by Parliamentarians during the 1648 siege, when the lead was used to make bullets (*ibid*, 8). The water house can be seen on the 1648 Siege Map and the Papillon Road cistern is shown on another fragment of map held in the local studies section of the Colchester Public Library (CPL 47, 48 and 52).

Sixteenth-century cess pits lined with septaria, flint, brick and peg tile have been recorded at 7–15 Long Wyre Street; these were fed by a simple clay-lined drain. The same site also revealed a 17th- to 18th-century peg-tile drain (*CAR 6*, 361). Elsewhere a peg-tile drain was noted at the Vineyard Press site (Dunnett 1971a, 38–42), and a drain formed of mortared tiles and associated with a 16th-century stone and tile plinth foundation was recorded at 19 High Street (CAT Report 2/88a). In the 17th century stone-lined latrines were gradually replaced by brick-lined ones (*CAR 7*, 3).

Aside from house drains, only a handful of water management features from this period has been excavated. Timber piles forming a river channel revetment were found associated with 16th- to 17th-century pottery in St Peter's Street, along with an unusual water main constructed from bored-out elm trunks 6m in length, which were reinforced by iron rings. Associated pottery could only be dated to the 17th–19th centuries (Benfield 1998c). This

type of main is known to have been laid in Colchester as late as the early 19th century (A Phillips, pers comm).

The Hythe

Little is known about the infrastructure of the corporation holdings at the Hythe during this period. The Portreeve's House at East Bay (MON241) still stands and has been surveyed (Crummy 1976, 89–103). A probable 16th-century warehouse at the Hythe (MON16) was recorded in 1922, but has since been demolished (RCHME 1922, 67, No. 188); this may have been one of the brick warehouses erected by the borough in 1623 (VCH 1994, *Essex IX*, 108). At some stage the cart bridge over the Colne at the Hythe was replaced by a stone bridge of three arches (MON24); this was recorded in 1741, but no longer survives. In 1717 the Customs House at the Hythe (MON28), shown on the 1876 map but since demolished, employed 10 officers whose job was to counter the extensive smuggling operations that flourished along the Essex coast (ibid, 142).

The town wall, town gates and castle

The town wall and its gates were neglected by the borough during this period and suffered significant damage during the 1648 siege. A number of the bastions were destroyed in the siege, including one uncovered during excavations at Lion Walk (*CAR 1*, 52–3; *CAR 3*, 84). A series of square-headed town gates is shown on Speed's map of 1610, but no medieval gate structures survive above ground or have been encountered in excavations. A ground-penetrating radar survey was undertaken by the Colchester Archaeological Trust in 2001 in order to locate the gates, but without success (Crummy 2002b, 21–2). Head Gate was the principal gate and this may have been located just to the north of the Roman gate (VCH 1994, *Essex IX*, 250). Part of the East Gate fell down in 1651, presumably having taken a battering in the siege (Morant 1768, bk I, 7). More of it was pulled down in 1676, although a 'Roman guardhouse' on the south side of this gate survived in 1813. The South Gate was demolished by the improvement commissioners in 1814.

The castle was allowed to decay in the 15th and 16th centuries and the bailey buildings, along with much of the bailey wall, had collapsed by 1622 (VCH 1994, *Essex IX*, 104). Houses began to encroach onto the site of the bailey ditch and house plots were laid over the castle ditch in 1680–3 (Morant 1768, bk I, 10). The castle continued to house the county gaol until 1633, but after the siege lost its military and penal functions. It was used as a source of construction materials by the builder John Wheeley in 1683, when vaults below the Norman floor were discovered. Wheeley removed the battlements and quarried the vaults for sand (P Berridge, pers comm). An excavation of the bailey for floodlight trenches in 2001 revealed that the facing stone of the castle was removed by Wheeley, as it was found to survive below the c 1700 ground level (Crummy 2002c, 8).

Domestic and commercial architecture

by Dave Stenning

While there are a considerable number of buildings surviving from the period 1540–1700, they have been little investigated compared with those of earlier times. Allowing for the fact that this overview will therefore necessarily be somewhat superficial, it would appear that the general pattern is similar to that elsewhere in north-east Essex, although reflecting the usual pressures on building form arising from the high density of urban housing.

The evidence suggests that, from the mid-16th century, good new oak was increasingly

difficult to obtain, leading to the extensive reuse of old timber. Poorer timber, particularly elm, was often employed, with some softwood appearing in the 17th century. Framing techniques, while reflecting the traditional methods, became less systematic and occasionally inventive, with the old methods apparently less relevant. The 16th century was a time of considerable experimentation with the domestic plan form, provoked partially by the introduction of chimney stacks and more generally by the desire to achieve greater comfort and convenience. For all of these reasons, it becomes more difficult to interpret timber-framed buildings and to differentiate between successive phases of work. The use of 'primary bracing' in wall framing became ubiquitous from the late 16th century onwards; this was a purely utilitarian construction technique which was covered by a coat of plaster.

From the mid-16th century (the early 16th century in west Essex), the crown-post roof was gradually superseded by roof types involving side purlins. In Colchester, the butt-purlin type is most in evidence, probably favoured as being more appropriate for the provision of attic dormer windows. There are an extremely large number of such butt-purlin roofs within the urban area, in many cases seemingly older than the buildings they cover. It is, however, probable that roofs of this type, which are difficult to date, were fashionable for a considerable period of time. The post-medieval buildings are predominantly of the 'long-wall jetty' types, made possible by the provision of chimney stacks. On occasions these have clearly replaced open halls, but new-built structures on virgin plots are also in evidence. There seems relatively little indication of the insertion of floors within open halls, as was prevalent elsewhere, but the survival pattern may be distorted. Observation would suggest that Colchester has a number of buildings of two more or less equal bays of a type that has been noted in numerous urban centres. Whether these were self-contained (they often appear to be), or occupied in association with adjoining structures, remains to be resolved.

An attractive feature of many of these long-wall jetty houses is their decorative supporting brackets. These were nationally fashionable and rely on a vocabulary of northern classical motifs, such as complex scrolls, pendants and geometrical mouldings. Investigation of an East Street example revealed that both the bracket and the post had been carved out of a single large timber. This extramural street has a number of fine examples, such as those at 17, 29, 35 and 37 (MON250, MON253, MON254, MON256). By the late 16th century the useable attic had become a desirable feature and these were either provided in new buildings, or converted out of existing roofs. Gables enjoyed a period of especial popularity and were often of the 'display' type, with windows to light the new attic. This period witnessed the gradual replacement of the unglazed diamond-mullioned window with windows of the ovolo-mullioned type. Generally, these were capable of being glazed and probably were, at least on the more public elevations. The high 'frieze' window was introduced, frequently into earlier elevations, together with projecting oriels.

Chimney stacks can be particularly difficult to date, especially where they lack any specific decorative detail. In Essex, they tend to have been first introduced at the low end of traditionally planned halls, backing onto the cross-passage. Further stacks were then constructed to heat the parlour and for cooking in a purpose-built or improvised kitchen. By the late 16th century, stacks could have first-floor fireplaces and appear in a wide variety of locations. The 'baffle' or 'lobby entry' plan form enjoyed popularity either in purpose-made or improvised layouts. With this arrangement, a double-sided stack is arranged so that its flank forms one side of a small entrance hall. The desire for draught-free buildings encouraged the rendering-over of timber frames and the construction of frames designed from the start to accept plaster. It is difficult to determine when this process first started in this part of Essex. In northern East Anglia, framing that was clearly designed to be largely

concealed appears at a much earlier date. It is probable that decorative pargeting was widely employed in Colchester, given that it was such a feature of the area. Surprisingly, there are few surviving remnants. The classical wreath and panels dated 1692 at 29–33 East Street are a particularly good, but late, example.

Standing buildings

A number of standing post-medieval buildings are worth mentioning. A very traditional-looking cross-wing, demonstrating that old concepts lingered well into the 17th century, is at 3A–4 Scheregate; it is a two-storeyed gabled building, jettied on two sides with a diagonal dragon beam. The corner post has decoration of a sub-classical type and there are small jetty brackets of complex profile. An inscribed date of 1656 (DOE 1971, 119) seems somewhat late and may represent a remodelling. At 29–32 West Stockwell Street there is another impressive and typical 17th-century house with long-wall jetty, elaborate brackets and further shaped brackets supporting a row of three jettied display gables.

Rebow House in Head Street is a substantial building with a well-finished roof of three almost equal bays. It is of 'A-frame' type with cambered raised collar, wind-bracing and two tiers of butt-purlins. Above the collar is a pair of struts arranged in the form of a St Andrews Cross. The lower and more substantial purlins are chamfered and stopped on their lower arrises, marking the position of dormers. At ground-floor level, at the front, are the remains of a massive entrance door under a jetty, all looking a good deal earlier. The location of this door, a little way back from the present frontage, suggests there has been encroachment on the street. The building at 49 North Hill has a somewhat similar 'A-frame' roof to Rebow House, of three unequal bays, but without the saltire arrangement of struts above the collar. It is a typical, but good-quality, example of a roof type of seemingly long duration.

The relatively modern shell of 39–41 Queen Street conceals a long-wall jetty house of two unequal bays. The square profile floor joists suggested a late 16th-century date and the former presence of jetty brackets implies an unusual ground-floor plan form. Both flanks had been formed by utilising the pre-existing gables of earlier buildings, a relatively common practice in this period. That to the south was of the mid-16th century and had had windows, demonstrating that this site had previously been open. The studs of this elevation had been painted blue/grey, providing a contemporary internal decorative scheme for the new building (for a summary of 16th- and 17th-century domestic wall painting in Colchester *see* Carrick 1989, 242–7). To the rear were remnants of a small earlier timber-framed structure with a jetty into this site.

A 15th-century building at 88 Hythe Hill had a parlour/solar block added to the rear c 1600 to form an L-shaped block, and A-frames were introduced into the old crown-post roof to replace the tie-beam and to provide a ceiling within the old roof space. A building at 46 North Hill comprises a two-storey frontage block and, to the rear, a spectacular early to mid-17th-century block with two storeys over a sub-basement. This is jettied to a passageway along the north flank and jettied again at eaves level. At each level there are three massive decorated brackets. The second floor has ovolo-mullioned windows with leaded lights. The plan form is, as usual, difficult to interpret, but domestic use seems most likely.

Excavated buildings

by David Radford

Changes in plinth construction, the insertion of brick chimney stacks and the conversion of open halls into two-storey structures in this period have been recorded archaeologically in the town. Post-medieval buildings have been excavated at Lion Walk, 12–13 Middleborough (MON76), Angel Yard in the High Street and at two locations on Hythe Hill (Table 7).

In the 16th century, hall houses with central hearths and service wings continued to be constructed. The most basic design was a two-cell structure comprising a central hall and a service room, of which examples include MON22/23 at Hythe Hill. In the 16th century MON332 at Middleborough was rebuilt with a smaller hall with central hearth, which in turn was replaced in the 17th century by a brick chimney stack (*CAR* 3, 194–5). Nearby was another hall house (MON333), which had its central hearth and wattle and daub chimney coping removed and replaced by a brick chimney stack in the early 17th century (*CAR* 3, 202).

At 133–134 High Street (MON55) fragments of a 17th-century structure were discovered and recorded in 1990, prior to demolition. They formed a semi-detached, virtually identical pair of units, with a shared central stack which probably provided a fireplace on each floor. Each building had shop windows of three arched openings and a door on the frontage. The first floor, which was jettied, with long primary brackets, had large mullioned and frieze windows. Above this there was a low attic storey lit by four-light mullioned windows in the gables. The wall framing was primary braced and the roof was of butt-purlin construction. The fireplaces served the rear part of the building and to either side of the stack were ladder stairs. The apparent separation of shops on the street front, with cellars below, from the accommodation to the rear suggests that the shops were rented (Shimmin and Carter 1996; fig 16).

Brick and tile

By the late 16th century the private use of brick was expanding, with the addition of brick wine cellars to a number of town houses. Examples include the Minories (MON103), where a herringbone floor survives in the rear cellar and the front cellar has arched brick storage recesses and a blocked-in entrance leading up to the High Street, and a house in Church Walk, which had a barrel-vaulted brick cellar. However, brick did not become universally used until much later. An example of early limited use is the Angel Inn (MON39), which had a 17th-century cellar constructed largely of septaria, similar to earlier High Street properties, but with several brick features, including recesses (Shimmin and Carter 1996, 63, fig 27).

From 1617, the corporation, which was itself building in brick from 1618, required new houses to have a tiled roof and a brick chimney instead of thatch with an open hearth (VCH 1994, *Essex* IX, 108), and examples of brick hearths of this period were noted at Middleborough (MON332; *CAR* 3, 194). A brick house of c 1620, now demolished, is known from Northgate Street and a brick warehouse built at the Hythe and dating to 1623 is documented (RCHME 1922, 67, No. 188; VCH 1994, *Essex* IX, 108). Evaluations have noted traces of early brick buildings at the Old Poultry Site (Crossan 1999b) and 40 Osborne Street (Benfield 1999).

Mortared foundations made use of peg tile from the 13th to the mid-14th century onwards and brick from the 16th century onwards. After the Civil War brick took over as the principal foundation material, as evidenced in a building in Osborne Street (MON459 (Building 179); Shimmin 1994, 51). Floors of clay or trampled earth were common from medieval into post-medieval times, although peg-tile floors (MON459; *ibid*) and more

elaborate floors of Dutch tiles at Sir Isaac's Walk and Lion Walk are recorded (MON210, MON333; *CAR* 6, 902; *CAR* 3, 81).

Manufacturing and trade

Colchester's coastal trade was focused upon London in the 16th and 17th centuries with draperies, cheese, butter, wheat, oats, malt, wood and faggots being exported and dyestuffs, soap, oil, groceries, ironware, coal and canvas imported in return. Newcastle was the second most significant trading partner, with imports largely consisting of coal and salt (VCH 1994, *Essex* IX, 86).

The town hosted three markets a week and three annual fairs. Records show that oysters and a sweetmeat known as 'sea holly' (a reputed aphrodisiac) were popular exports and fishing remained a key component of the local economy. As well as oysters and eels, sprats were also consumed in such quantities that they were locally known as 'weavers' beef'. The borough had fishing rights from North Bridge all the way to the mouth of the estuary by ancient charter (far beyond the borough), which was a recurring source of conflict with neighbouring parishes (VCH 1994, *Essex* IX, 264–6). The town was also the county's leading corn market and had an important leather hall, wool market and fish market (ibid, 83, 104).

Trade tokens are known from the town; these tokens were produced illegally in the mid-17th century, mainly by shop- and inn-keepers, to make up for deficiencies in the money supply. Many have designs linked to a variety of trades, such as grocer, bay maker, mercer, baker and apothecary (Williamson 1889, 215–20; Judson 1987, 54–93).

There is considerable documentary and archaeological evidence for the presence of apothecaries along the southern part of the High Street and in the vicinity of Lion Walk. A pit from Lion Walk dated to c 1600–40 contained a complete triangular 'Hessian' crucible the type of which suggested a 15th-century date, although they are also known from Dutch paintings of the mid- to late 17th century. It contained mercury droplets, suggesting alchemical practices. The disposal of this crucible, along with other objects in the pit, may be connected to the death of Robert Buxton, a local apothecary, in 1655 (*CAR* 7, 288–90, fig 197). The excavations at Lion Walk also encountered extensive pit-digging from the late 16th to the 18th centuries, which was thought to relate to the gardens of the Red Lion Inn and of other shops on the High Street. Large numbers of tin-glazed apothecary jars were recovered. The Red Lion is known to have been owned by wealthy apothecaries at this time (*CAR* 7, 230–2). A copperware scale pan, a drug pot, medicine bottles and salt-glazed ointment pots were found at 24 High Street in 1949–50, an assemblage suggesting an apothecary's shop; the pottery from the assemblage was mostly of 17th- to 18th-century date (Gant 1951, 126).

Local or county-based potters were the principal suppliers to the town throughout this period, with a minority of wares coming from the rest of England or abroad (*CAR* 7, 354). Essex red wares replaced the older medieval sandy wares as the most popular form from the mid-16th century, and remained dominant. Imported wares were significant into the late 16th century, the most popular type being Rhenish stonewares, which were associated with the developing drinking culture in the town. The geographical position of Colchester ensured that Rhenish and Low Country imports prevailed, in contrast to the situation in towns along the south coast, where French and Mediterranean wares predominated (Brooks and Hodges 1983). Useful excavated assemblages from Colchester include those from Stockwell in 1958 (Blake *et al* 1961) and Lion Walk, Angel Yard and Middleborough. The finds are mostly domestic ware recovered from rubbish pits. Documentary evidence records

potters at Ardleigh, Dedham and Tiptree during this period (*CAR* 7, 364–9).

Archaeological evidence for pottery or tile kilns from this period is poor. In 1950 two-handled tygs of *c* 1650 were found at the back of Messrs Simkins on North Hill, where a small pottery kiln was also found with a series of arches like those of a tile kiln (CMR 1950, 34). In addition, fragments of Tudor stove tiles from Crouch Street and Maldon Road may have been locally produced (Gaimster 1988, figs 2.3 and 2.4).

Clay pipes have been recorded from numerous sites in the town, although those from the Lion Walk site are currently unpublished (Gant 1958; 1960b; Eddy and Ryan 1983; *CAR* 9, 235). A possible pipe kiln of *c* 1700 date, with clay walls containing clay pipe fragments, was observed during construction work on a site at the corner of High Street and Maidenburgh Street. Fragments of saggars were recovered, as were pipes stamped I/A, which are identified with a merchant, John Austine, who may have been Flemish in origin (Gant 1960b, 44). More than 100 clay tobacco-pipe bowls, which may represent a tavern dump, were recovered from a pit at Middleborough (*CAR* 5, 47–66).

Little evidence for post-medieval metalworking has been recovered from the town. Debris from smithing has been recorded at 79 Hythe Hill, where the activity appears to continue from the 16th into the 18th century (Brooks 2000, 122). Other traces of metalworking were recovered from the old Post Office site on Head Street in 2000; here copper-working moulds, fused metal waste and soot were recovered, indicating the existence of a bronze foundry (Fawn 2002, 28).

Mills are well-documented in town records. In 1632 upwards of 20 corn mills are recorded in the borough, a number that must have included outlying places such as Layer, where there were two mills together. The principal corn mills were Lexden Mill (MON912), Middle Mill (MON915), East Mill (MON916), Hythe Mill (MON27), Bourne Mill (MON265) and Cannock Mill (MON1050), but some of these, such as Middle Mill, were also used for fulling (VCH 1994, *Essex* IX, 259–63; Benham 1979, 91–102). Two fulling mills, Stokes Mill (MON913) and North Mill (MON914), disappeared in the late 16th century, but were replaced by the newly established Crockleford Mill (MON1059) on Salary Brook by *c* 1588. Little has survived of these mills, although traces of the millponds can be seen in the river and stream channels. Middle Mill was demolished in the 1950s and part of the mill's 19- or early 20th-century machinery survives in Castle Park. East Mill was almost entirely rebuilt in the 19th century, but the 18th-century miller's house survives. At Bourne Mill the mill and fishponds survive; the mill was originally built as a fishing lodge in 1591, probably using stone robbed from St John's Abbey, and only later, in the 19th century, was the building converted into a mill. A series of watching briefs undertaken during repair work on the mill have produced only limited information relating to its later use (CAT Reports 4/94b, 11/93b and 4/93b).

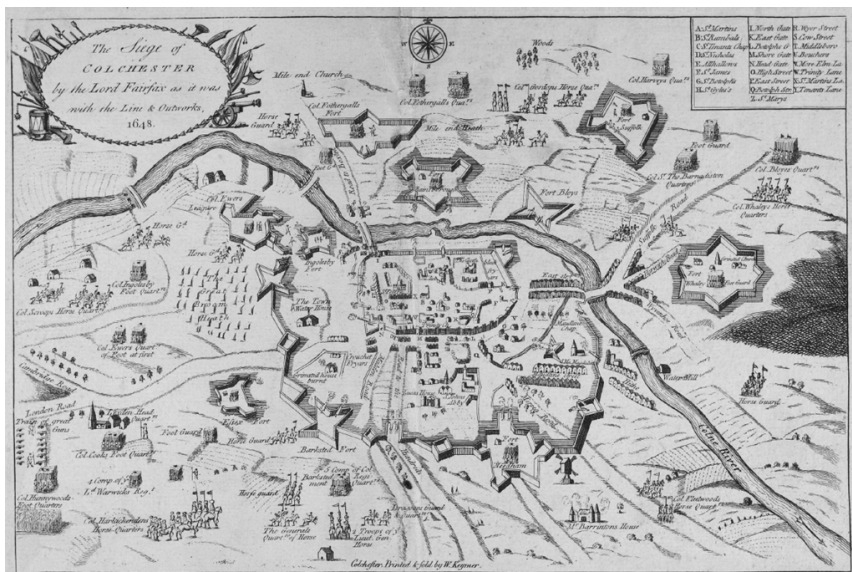


Fig 12.4 *The 1648 Siege Map shows the Parliamentary batteries and siegeworks encircling the town (Essex Record Office).*

The cloth industry

Cloth manufacture was an involved process that utilised a series of specialised structural forms and dedicated tools. Yarn was purchased in bulk from a specialised store called a packhouse and then taken to weaving houses. Woven cloth went to a fulling mill, where it was soaked in urine for 12 hours before being fulled (the cleaning and thickening of cloth with fuller's earth). It was then stretched on a tenter in the open air to bring it back to shape. Bleaching followed in a fume house, where the cloth was hung in an atmosphere of burning sulphur. It was then sold to the finishers for dyeing and the completed cloth would pass through the Bay Hall for sealing (Heard 1970, 124).

Unfortunately little, if any, of this infrastructure has survived intact or been detected during archaeological investigations to date. Nevertheless, a number of the town houses constructed from the profits of weaving have survived, of which a few can be linked to the trade through surviving inscriptions; for example, a carving with the inscription 'H W' in the Marquis of Granby public house on North Hill may belong to clothier Henry Webb (RCHME 1922, iii, 61). Another beam recovered from the High Street has a merchant's mark and the initials A B dated 1597, perhaps belonging to a wool merchant named A Bartram (CM archives).

Documentary and cartographic evidence demonstrate that cloth-makers located themselves near water sources east, south and west of the town. A cloth-maker named Nicholas Maynard had water piped to his property in East Street from the Colne in 1549, and a tenter yard and tenter garden adjoined this property in 1571 (VCH 1994, *Essex IX*, 104). This yard survived in 1768 and is shown on Morant's map along with other tenter grounds on the site of St Mary's Hospital and lower Castle Park (Morant 1768, bk 1, facing p 4).

Finds from the town relating to the cloth trade include seals used for quality assurance.

Lead cloth-maker's seals have been found at the Union (St Mary's Hospital) and Castle Park (for example, COLEM:1933.380 and COLEM:1936.712). In addition, seals of both lead and copper alloy have been recovered from several archaeological sites around the town: Angel Yard, Lion Walk, Butt Road, Balcerne Lane, Gilbert School and Middleborough. The most significant group was from Middleborough, where eight seals of late 16th- or 17th-century date, including one which was unused, were found, suggesting that cloth-working or sealing may have occurred nearby (*CAR* 5, 35). Among this group were an alnage seal, put on cloths examined by an alnager (a crown officer), a large local community seal used by the Dutch community and a clothier's or weaver's seal identifying the owner or the maker of the cloth (*CAR* 5, 33–5).

In the 16th century sealed cloth from Colchester was transported to Queenhithe in London, where the bindings were cut and the seals discarded. During the 1940s a large quantity of discarded seals was recovered from the Thames foreshore, among which were several examples belonging to David Duyts of Colchester, including a seal that combines a merchant's mark dated 1574 and another which retained a fragment of 16th-century baize material (Harley 1955, 142–3). Other small finds related to the trade include, from Lion Walk, Balcerne Lane, Middleborough and Culver Street, a number of Nuremberg and Dutch thimbles used in the manufacturing or working of cloth (*CAR* 5, 28–30).

The Civil War

The 1648 Siege Map of Colchester provides only a stylised plan of the siege works around the town and to date little archaeological evidence has been found to enhance our understanding of these emplacements (Fig 12.4; Mabbitt 1998, 1–6; Crummy 1998b; 1999a). The outer siegeworks comprised a series of trenches and palisaded forts designed to encircle the defenders and provide firing platforms for siege cannons. Corresponding earthwork defences were built by the Royalists around the perimeter of the town walls and the precinct of St John's Abbey (the mound or 'mount' in the abbey grounds being a possible candidate for a gun platform). A number of the forts apparently survived for some time after the siege, long enough at any rate for fields to acquire names reflecting their presence, such as 'Little Fort Field' and 'Great Fort Field' at Sheepen; however, nothing now remains of them.

The sites of three of the Parliamentary forts have been identified: the small fort found during the 1930s excavations at Sheepen (Hawkes and Hull 1947, pl CV; *CAR* 7, 218–19); a possible gun emplacement to the south of it (Hall 1958, 39–49); and part of Colonel Fothergall's fort, located north of the Colne. During the excavations on Sheepen Hill in 1931, just south of the former farmhouse, latrine trenches and traces of camp fires were noted. Small finds included lead bullets, parts of the locks of muskets, a complete 'lobster cage' helmet, pottery, a cuirass, stirrups, spurs, leaden powder canisters, keys and clay tobacco pipes (Rudsdale 1948, 167; CMR 1932, 45, 51–3, pl XIV; *CAR* 7, 218–19). The Civil War ditches are recorded on the plan in *Camulodunum*, but were never fully published (Hawkes and Hull 1947, pl CVI). A later aerial photograph clearly shows the outline of a star-shaped fort, which has been identified as the redoubt to the south of Colonel Ewer's fort, located in the fork of Sheepen Dyke (Crummy 1999a); this has also been mapped by geophysical survey by Peter Cott (Crummy 1998b).

A ditch at Sheepen (F278), excavated in 1970, may have also belonged to the Parliamentary earthworks (Niblett 1985, 14–15). If so, it would have been part of Colonel Ewer's fort, an earthwork sometimes confused with the smaller Sheepen fort to the south mentioned above. At 'The Oaks' on Lexden Road a metal platform, evidently a Civil

War gun emplacement, was recorded on a spur of land in 1956 (Hall 1958, 39–41). North of the river Colne, excavations at the Asda site on Turner Rise encountered ditches thought to belong to the siege line or one of its camps (P Crummy, pers comm).

In 1931, excavation for a footpath on the north side of the road at Lexden Hill, just opposite 'The Lindens', revealed a stirrup, some trace hooks from a cart and some iron studs from a wagon wheel, which are perhaps finds relating to the Civil War (Rudsdale 1948, 167). However, this location does not seem to tie in with the location of the siege line, which, judging by the Siege Map, must have crossed Lexden Road further east. Elsewhere the rectangular earthwork at Brinkley Grove was sectioned in 1998 to see if it could be dated to the Civil War, but the results were inconclusive (Benfield 1998d). A fieldwalking and metal-detector survey at High Woods in 2000 produced a range of finds of Civil War and post-medieval date (FND276). These included four lead powder measures and 85 musket balls suitable for firing from a range of Civil War firearms. There was also a significant quantity of lead casting spillage which is believed to be manufacturing waste from the production of musket balls; this suggests that Fort Rainsborough, marked on the Siege Map, was located nearby (Wise 2000, 5–6).

Alderman Jarmin noted several unidentified skeletons in St John's Street and Crouch Street that he considered to be the remains of men killed in a skirmish documented to have occurred on 13 June 1648. Brass buckles and a button indicated that these were not Roman remains (Jarmin 1913, 256–7). In 1953, Hull sectioned the bailey ditch south of the castle and recorded a quantity of animal bones which he interpreted as debris from the siege. The assemblage contained a large number of cat bones, which supports the historical accounts that vermin and pets were eaten to stave off hunger. The pottery from the ditch was dated to c 1650 and consisted of the usual brown-glazed wares, Delft wares, drug pots, stonewares and beer jars of the period (EVT3057).

The siege may have destroyed as many as 200 houses (Porter 1986). Siege damage can be seen along the town wall, where there are several 'siege breaches', and, famously, at 'The Siege House' in East Street, where there are musket holes in the walls. Churches affected include St Mary at the Walls, St Martin's, St Botolph's, St Leonard's at the Hythe and St Andrew's at Greenstead, while the gatehouse of St John's Abbey suffered extensive damage to its roof and upper storey. Remnants of houses possibly burnt in the siege have been excavated at Osborne Street (Shimmin 1994, 56–7) and Lion Walk (*CAR* 3, 84). Cannon balls probably from the siege have been found at Margaret Road (CM records) and Culver Street on the corner of St Nicholas Passage (unpublished note by A M Jarmin in CM).

Agriculture

An analysis of post-medieval agricultural development within the borough is beyond the scope of this study. In general terms the agricultural evolution of north-east Essex is characterised by piecemeal enclosure of open fields and common land over a long period. The ridge and furrow earthworks characteristic of the Midlands are absent in Essex. This may result from a number of factors, such as early enclosure patterns, the use of ditches rather than ploughed furrows for drainage and perhaps the relatively larger proportion of pasture and common land that existed during the medieval period in Essex compared with the Midlands. A different method of cultivation, called 'stetch' ploughing, which was used in East Anglia, produced only low and short-lived ridges that have not survived 19th- and 20th-century arable intensification, except in isolated fragments.

Speed's map shows that in 1610 a number of large arable fields, as well as a series of garden and horticultural plots, survived within the walls. Traces of intramural agricultural

activity have not traditionally preoccupied archaeologists but, nevertheless, at Culver Street a number of small pits filled with dark earth may have been traces of 16th- to 17th-century horticultural activity (*CAR* 6, 123).

The post-medieval period was significant for the disappearance of woodland from the northern part of the borough. Morant recorded in 1768 that, 200 years earlier, 'King's wood made a considerable appearance on the north side of town but [now] is entirely gone' (Morant 1768, bk I, 12). Another documentary trace of ancient woodland is a record of 1568 that notes that an ancient limewood in the borough was only recently extinct (Rackham 1999, 31). Such woods had been in retreat since the Bronze Age.

The current state of knowledge

by Philip Crummy

The development of late medieval and post-medieval houses has been characterised archaeologically, particularly by noting changes in the character of plinths and the insertion of brick chimney stacks for the conversion of open halls into two-storey structures. Although a growing body of surveys has been accumulated, there is still considerable potential for further survey of standing structures. In contrast, the development of the former monastic institutions following the Dissolution remains uncharted and little studied.

The 1648 siegeworks remain largely unexplored, although an attempt has been made to map them as far as the available information will allow (Crummy 1998b; 1999a). Apart from the three forts mentioned above, the Parliamentary earthworks, including the ditch which linked the forts together, remain unlocated on the ground. The Royalists also built earthworks, but these are even more obscure. Although the excavation of the Sheepen fort was never fully published, the records and finds show that the investigation of siegeworks could prove very fruitful in terms of earthwork morphology and related finds of equipment and munitions.

The effects of the great plague of 1665–6, or indeed any of the other serious epidemics to affect Colchester (VCH 1994, *Essex IX*, 67–8), are invisible in the archaeological record. The traditionally held belief that the mound which stands in the south-east corner of St John's Abbey precinct was a 'plague pit' may well be true, especially as there is an unsubstantiated record on the 1875 OS map to the effect that human bone was found in the mound in 1867. However, in the absence of proper fieldwork, other explanations for the mound, such as that it is the remains of a garden feature or a Royalist earthwork of 1648, cannot as yet be discounted (Crummy 2002d, 27).

Physical evidence in the ground for the cloth trade in this period, as in the previous one (*see* page 268), is almost nil, despite its importance to the town. Archaeological deposits of post-medieval date can contain substantial quantities of well-preserved animal bone and other ecofacts, but, like all post-Roman deposits, these suffer from the problem of potential contamination through the presence of earlier material, which is difficult to distinguish from the later.

Preservation

The below-ground remains of post-medieval buildings have been badly affected by subsequent redevelopments of various kinds, especially the construction of cellars on street frontages in the 18th and 19th centuries and the invasive groundworks which characterise many of the building projects of later times. This means that the post-medieval archaeological remains along the High Street and Head Street frontages tends to be limited

to rear wings and any ancillary structures which stood in the backyards. It is normally only where buildings are well away from the core of the town centre that complete building plans might be recoverable, as, for example, at Middleborough (*CAR* 3, 190–209).

Places where the ground water is relatively high (notably in the Osborne Street area and the foot of Balmerne Hill/North Hill and St Peter's Street areas) are likely to produce well-preserved leather and wood.

Importance

Post-medieval Colchester is of considerable regional archaeological importance as a market and a port, as well as for its pottery assemblages, although much of what the town has to offer on a domestic scale can be replicated in other Essex and East Anglian towns and villages. As with the late medieval town, post-medieval Colchester ought to be of national importance for buildings and finds relating to the cloth industry, although that is yet to be well demonstrated. The siegeworks stand out as relatively important. Colchester and Newark were the only towns in the Civil War where a besieging force built a complete circumvallation (Hutton and Reeves 1998, 215), and the excavation of a small part of the fort at Sheepen has shown the archaeological potential of such works.

Potential for future research

The potential for future research is similar to that for late medieval Colchester: excavations of the quays at the Hythe are likely to provide archaeological evidence for trade as well as related organic finds for post-medieval Colchester. Similarly, a wider investigative programme at the Hythe is likely to provide information on the buildings behind the waterfront and up Hythe Hill as far as and beyond St Leonard's church. House sites available elsewhere in Colchester for excavation are likely to be especially important if significant parts of their timber frames are intact. So too will be any which can be associated with particular merchants or industrial industries, such as weaving and fulling, recorded in historical sources. The excavation of sites rich in organic remains is likely to provide evidence for leather and cloth industries. The finds of post-medieval glass made in the town would benefit from further study and publication.

Although the excavation of the Sheepen fort was never published, the records and finds show that the investigation of the siegeworks could prove fruitful in terms of earthwork morphology and the equipment and munitions in use at the time. Finding the sites, however, will prove tricky. Excavations in the former precincts of St John's Abbey and St Botolph's Priory should lead to a better understanding of the post-Dissolution history of both sites.

13 Post-1700 Colchester

by Andrew Phillips

Introduction and historical framework

In 1700 Colchester was a major industrial town and, with an estimated population of 9,000, still among the 15 largest provincial towns in England. Already, however, the cloth trade on which its growth had rested was facing long-term decline, a process which accelerated after 1715 when a major crisis in the industry caused widespread local unrest.

In the decades that followed, the economy became stagnant and the population seems to have fallen. Political corruption led to the suspension of the town's charter of self-government in 1742; not until 1763 was the effort made to restore it. Nevertheless the cloth trade died slowly, a few of the larger concerns remaining in business until almost the end of the century. Colchester also enjoyed that urban renaissance which was common in mid-18th-century England, with improved travel facilities, pleasure opportunities and retail growth (Wise 2009). It was still a major market town – the largest in Essex. It was also an important port, and the Hythe became a busy industrial centre.

In a century of almost continuous warfare, Colchester often found itself hosting troops, which were usually billeted in its inns and houses. The onset of the French Wars (latterly the Napoleonic Wars) led to the establishment of a large military garrison in Colchester. At times as many as 6,000 men were based in the area, considerably boosting the local economy and leading to the building of the largest new barrack complex in Britain.

This garrison was totally disbanded (and demolished) after 1815 and Colchester reverted to its market town status for its livelihood. The period 1815–40 was, in consequence, one of limited economic progress even though the town's population grew steadily throughout that time. Matters improved after 1843 with the arrival of the railway, which in turn encouraged the government to once more make Colchester a major garrison town: then, it had a population of 3,000 military and 19,000 civilians (Fig 13.1). One calculation suggests that an additional £60,000 a year was spent in the town, rising by 1914 to £100,000, when extensive garrison accommodation covered a large area to the south of the rapidly expanding town (Fig 13.2; Douet 1998, 134–7).

A rail and water transport system boosted not only agriculture-related industries like brewing, milling and grain exporting, but also a flourishing retail centre and the rise of factory production in engineering, footwear and clothing manufacture (see, for example, the role of the engineer James Paxman in this process: Phillips 2002). In the period 1880–1914 Colchester experienced prosperity and something of a late industrial revolution (Fig 13.3). Public buildings reflect this new self-confidence: these were exemplified by a giant water tower (nicknamed Jumbo) providing a 24-hour municipal water supply and a lavish town hall, opened in 1902, itself a public celebration of the town's long history and recent prosperity.



Fig 13.1 A view of Colchester High Street in 1858, including three buildings now demolished: the Cups Hotel in 1972, the first Victorian Town Hall in 1899 and St Runwald's Church in 1878 (Colchester Museums)

The 20th century was marked by two World Wars, in both of which Colchester played a large part. During 1914–18 the town was full of soldiers, whose numbers occasionally equalled the current civilian population of 40,000. Colchester became a major training and hospital centre. Its engineering and clothing factories were exceptionally busy with war work. Full employment was matched by a high death toll among the town's enlisted young men and widespread Home Front fatigue. The 1918 'flu epidemic took its toll and the cumulative psychological damage was still evident in the decade that followed. As in Britain as a whole, the 1920s were a period of economic dislocation and class conflict. The improving 1930s economy was particularly marked in the town, with rearmament keeping the engineering firms busy. Nevertheless, population growth and industrial advance were minimal during the inter-war period.

World War II saw the town once more full of soldiers (which now included both the Dominion and American troops) and busy with war manufacture. Once more engineering and the clothing industry were particularly important. As part of the hastily assembled defences of Greater London, the so-called 'Colchester Stop Line' (or more formally the

Eastern Command Line) passed through the town, while Colchester itself was fortified as an 'anti-tank island' (Nash 1997, iv–v; 2002, 33, 35). While initially in receipt of evacuees from Greater London, the town itself became an evacuation area after the fall of France. Radar and the little regarded war of the North Sea lanes were important in the area, but the town suffered surprisingly little war damage. The most severe was an incendiary raid in February 1944 which destroyed two large factories, an engineering works building engines for D-day and 10 retail premises.

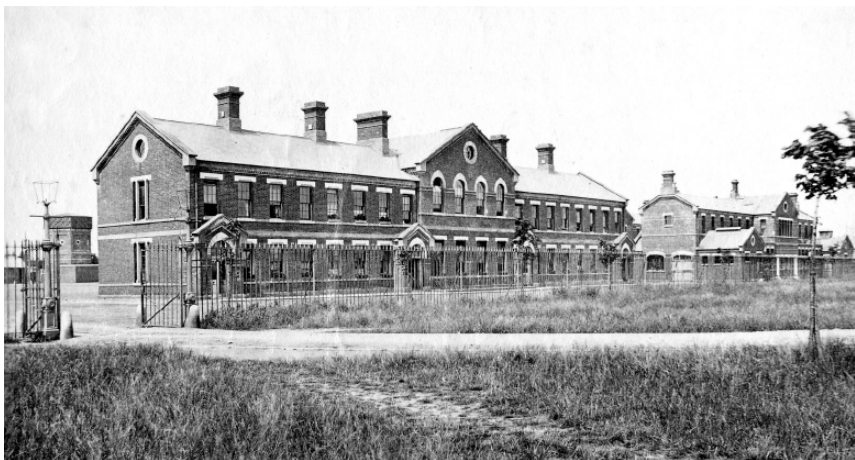


Fig 13.2 The officers' quarters at the Le Cateau Barracks built in the period 1873–5 for the Royal Artillery and part of a very rare surviving group of military buildings (Colchester Museums).



Fig 13.3 Workmen leaving Paxman's engineering works at the Hythe in 1910 (Colchester Museums).

In 1950 Colchester was still a very provincial town, viewed by newcomers as rather quaint and at the end of the line. From the mid-1960s change accelerated as the population once more grew apace and immigrants began to outnumber the indigenous. For a provincial town, manufacturing industry, especially engineering, was remarkably prominent, but the town made a successful transition into service and light industry and did better than most when engineering began to decline from the 1970s onwards. From 1946 a massive programme of house building, rolling on into the 1960s and 1970s, transformed Colchester. So large a population put great strain on its historic core and much agonising attended the efforts to accommodate the motor car and the consumer needs of an affluent society. Large and successful industrial estates arose and the town's bypass received its own bypass. Nevertheless, change was achieved with less agony than in many other historic towns. Opinion polls conducted in the 1990s showed Colchester to be a contented town with a high degree of satisfaction among a population which now topped 100,000. The century ended with accusations of Colchester being part of Estuary England and with a failed bid to secure city status.

Assessment of importance and potential

Despite the major redevelopment of Colchester which marked the period 1965–2000, a great deal of rescue archaeology has concentrated on the evidence for Roman Colchester. The post-1700 period (and, indeed, the entire 'early modern' period) has received little focused attention. Surviving timber-framed buildings have yet to receive a dedicated (as opposed to piecemeal) study, and knowledge of the town's important cloth trade is based on

documentary evidence and the assumptions drawn from those documentary sources. The recent 'cellar survey' by the Colchester Archaeological Group needs to be followed up with an 'upstanding structure' study of the town's central shopping area. The current development of the Hythe has seen little attention to its below-ground industrial archaeology.

Given the size and importance of the town's Napoleonic garrison it is remarkable that no images of this have survived: we have only one plan from this time. Nevertheless, there are undoubtedly some residual archaeological remains, which, as sites become available, will need detailed study – the very large military hospital, for example, one wing of which was reassembled to form the Colchester and Essex Hospital, which still exists on Lexden Road. The garrison, in turn, encouraged the building of one of the largest porter breweries outside London at St Botolph's Corner. This magnificent complex, which had a Boulton and Watt engine, can be researched via surviving documents and could probably be reconstructed using OS maps and isometric projection from several surviving photographs.

Mid- and late Victorian Colchester saw the building of a growing range of specialist industrial buildings, many of which, their equipment destroyed, have been reused for modern purposes. These included breweries, maltings, grain stores, lime kilns, large gas works (at the Hythe) and engineering premises. Others have been demolished so recently that plans and photographs can be used to reconstruct them – for example, one of only two silk throwing mills in southern England was in St Peter's Street. Photographs of these premises in their industrial days should also be sought. On Stanwell Street is part of the oldest foundry building in Essex and perhaps the oldest purpose-built ready-made clothing factory in the world. The enormous Paxman complex on Hythe Hill, dating from 1865, included timber-framed workshops and a very early riveting tower, and is a major regional site, deserving of study and preservation. It is currently under threat and should be photographed. Colchester is still surprisingly full of street furniture, railings and manhole covers made in local foundries and proudly displaying makers' names, of which a photographic survey is also needed. The same applies to the garrison site, which is vast and very important, being probably the best-preserved Victorian garrison site in Britain.

Domestic housing is another important Victorian legacy. New Town was made a 'conservation area' when the majority of its buildings had been significantly modified with modern materials, including new roofs and new windows. Similarly, the Lexden Road enclave of Victorian 'mansions' needs study: their historic occupiers could be researched and building dynasties such as the Haywards studied. Specialist facilities such as coach houses, cellars, Victorian greenhouses, cottage gardens, servants quarters, even shrubs and trees are constantly subject to change with new (often multiple) current ownership.

The 20th century has in turn produced a number of important industrial buildings and housing initiatives, although not one Colchester 'pre-fab' survives! A similar programme of photography, documentary research and oral history should be undertaken now for these remains. The Severalls Hospital site is an obvious example. The unnecessary destruction of its documentary archive is now followed by the threat of the destruction of its buildings.

Major redevelopments at Lion Walk (1968–76) and Culver Precinct (1984–7) have changed central Colchester from an area of multi-period buildings and mixed housing and retail into a modern shopping town little different from other large towns in Essex, and those envisaged at St Botolph's would continue this trend. The town's historic core, never very large, has come under immense pressure from large-scale redevelopment and the motor car. A major and urgent task should be to assess the balance between new and old, to draw up a local conservation plan and to make this a blueprint for 21st-century development.

Appendices

Gazetteer of prehistoric monuments, elements and finds from the study area

Widow.

~~WID177~~si Road

~~WID200~~li Camp

~~WID254~~ick

~~WID268~~Street

~~WID277~~n

~~WID281~~Street

~~WID277~~nic

~~WID254~~ick

~~WID264~~Heath

~~WID268~~Street

~~WID268~~Street

~~WID268~~ids

~~WID277~~ic

~~WID277~~al Street

~~WID277~~old Road

~~WID277~~old Farm

~~WID277~~ick Ranges

~~WID277~~oad

~~WID277~~ic

~~WID277~~icet

~~WID277~~ic

~~WID277~~ic

~~WID277~~ic Abbey Grounds

~~WID277~~Street

~~WID277~~Open

~~WID277~~Valley

~~WID277~~Street

~~WID277~~Street

~~WID277~~oad

~~WID277~~Ave

~~WID277~~ic

~~WID277~~ic

~~WID277~~ic

~~WID277~~ic

~~WID277~~ic

~~WID277~~ic Hospital

~~WID277~~ic Court

~~WID277~~ic Heath

~~WID277~~ic

~~WID277~~ic Road

~~WID277~~ic Munn Barracks

~~PO1011027~~Pit, Sheepen
~~PO101108~~reet
~~PO101108~~reet
~~PO101109~~reet
~~PO101109~~reet
~~PO101105~~School
~~PO101105~~s Abbey Grounds
~~PO101105~~s Abbey Grounds
~~PO101105~~School
~~PO101107~~d, Sheepen
~~PO101107~~d, Sheepen
~~PO101103~~n
~~PO101106~~d
~~PO101107~~Road
~~PO101105~~School
~~PO101105~~s Abbey Grounds
~~PO101100~~
~~PO101105~~n ground
~~PO101103~~ise
~~PO101107~~
~~PO101101~~High School for Girls
~~PO101104~~'s School
~~PO101103~~use
~~PO101102~~d
~~PO101105~~ane, Middleborough
~~PO101105~~ane, Middleborough
~~PO101105~~ane, Middleborough
~~PO101105~~ane, Middleborough
~~PO101105~~ane, Middleborough
~~PO101105~~ane, Middleborough
~~PO101107~~Road
~~PO101107~~2e Road
~~PO101102~~ve
~~PO101106~~ Mary's Hospital
~~PO101103~~n
~~PO101103~~s Hospital
~~PO101103~~ic
~~PO101105~~ane
~~PO101106~~reet
~~PO101106~~er Road
~~PO101106~~ Farm
~~PO101106~~ut
~~PO101103~~id Hospital
~~PO101105~~School
~~PO101105~~School
~~PO101107~~Munn Barracks
~~PO101107~~reet
~~PO101107~~reet

Gazetteer of late Iron Age monuments, elements and finds from the study area

Map to

~~1000000~~ 1000000 82 Stimulus

~~1000000~~ 1000000 1e

~~1000000~~ 1000000 14 range

~~1000000~~ 1000000 570 Cemetery

~~1000000~~ 1000000 588 Road, Lexden

~~1000000~~ 1000000 1615

~~1000000~~ 1000000 2015

~~1000000~~ 1000000 363 gn, Sheepen

~~1000000~~ 1000000 369 Lodge

~~1000000~~ 1000000 388 Road

~~1000000~~ 1000000 385 Institute

~~1000000~~ 1000000 416 Rd

~~1000000~~ 1000000 567 Road

~~1000000~~ 1000000 1201 Approach Road

~~1000000~~ 1000000 1202 Approach Road

~~1000000~~ 1000000 1204 Approach Road

~~1000000~~ 1000000 1205 Approach Road

~~1000000~~ 1000000 1208 Munn Barracks

~~1000000~~ 1000000 1207 Munn Barracks

~~1000000~~ 1000000 1215

~~1000000~~ 1000000 1216

~~1000000~~ 1000000 1209 Institute Car Park

~~1000000~~ 1000000 1238 ns, Lexden Road

~~1000000~~ 1000000 1100 ns, Lexden Road

~~1000000~~ 1000000 121 Dyke

~~1000000~~ 1000000 1238h Dyke

~~1000000~~ 1000000 1237 Grove Dyke

~~1000000~~ 1000000 1229 m Dyke Middle

~~1000000~~ 1000000 1233 m Dyke North

~~1000000~~ 1000000 1230 Dyke Middle (Lexden Park)

~~1000000~~ 1000000 1233 Dyke North

~~1000000~~ 1000000 1235 Dyke South

~~1000000~~ 1000000 1232 m Dyke (Lexden Dyke)

~~1000000~~ 1000000 1200 Dyke

~~1000000~~ 1000000 1204 n Hall Road

~~1000000~~ 1000000 1201 Munn Barracks

~~1000000~~ 1000000 1202 Living and commercial site at Sheepen

~~1000000~~ 1000000 12305 Field

~~1000000~~ 1000000 1228

~~1000000~~ 1000000 1202 Road Barracks

~~1000000~~ 1000000 1202 on site

~~1000000~~ 1000000 1202 on site

~~1000000~~ 1000000 1202 on site

~~1000000~~ 1000000 1202 on site

~~1000000~~ 1000000 1202 on site

~~1000000~~ 1000000 1202 on site

[illegible]

~~110N1005~~ West of Colchester Cemetery
~~110N1006~~
~~110N1007~~

Gazetteer of Roman monuments, elements and finds from the study area

~~110N1008~~ Heather
~~110N1009~~ ditch?
~~110N1010~~ school
~~110N1011~~ school
~~110N1012~~ 415
~~110N1013~~ 415
~~110N1014~~ 415 Building 3
~~110N1015~~ 415
~~110N1016~~ 415
~~110N1017~~ 415
~~110N1018~~ Street
~~110N1019~~ Street
~~110N1020~~ Street
~~110N1021~~ Street
~~110N1022~~ Street
~~110N1023~~ Street
~~110N1024~~ Street
~~110N1025~~ 27 College
~~110N1026~~ 9 Theatre
~~110N1027~~ Street
~~110N1028~~ Street
~~110N1029~~ Street
~~110N1030~~ Street
~~110N1031~~ Exchange Site
~~110N1032~~ 161
~~110N1033~~ 145, 60 Ditch
~~110N1034~~ 195, BKC 73-6
~~110N1035~~ 1054 ton Lodge
~~110N1036~~ 112 ton Lodge
~~110N1037~~ 1711
~~110N1038~~ Street
~~110N1039~~ School
~~110N1040~~ Street
~~110N1041~~ Street
~~110N1042~~ Street
~~110N1043~~ 94
~~110N1044~~ Street
~~110N1045~~ Street
~~110N1046~~ Street
~~110N1047~~ 23 ar Park, Nunn's Road
~~110N1048~~ School
~~110N1049~~ Lane
~~110N1050~~ 11970 fortress
~~110N1051~~ 1970 fortress
~~110N1052~~ 1074-S
~~110N1053~~ 532
~~110N1054~~ 331

~~MA00004~~ Hill

~~MA00005~~ 1rough

~~MA00006~~ 2rough

~~MA00007~~ 3rough

~~MA00008~~ 4rough

~~MA00009~~ 5rough

~~MA00010~~ 6rough

~~MA00011~~ 7rough

~~MA00012~~ 5reet

~~MA00013~~ 5reet

~~MA00014~~ 5reet

~~MA00015~~ 5reet

~~MA00016~~ 5reet

~~MA00017~~ 5reet

~~MA00018~~ 5reet

~~MA00019~~ 5reet

~~MA00020~~ 5reet

~~MA00021~~ 5reet

~~MA00022~~ 5reet

~~MA00023~~ 5reet

~~MA00024~~ 5reet

~~MA00025~~ 5reet

~~MA00026~~ 5reet

~~MA00027~~ 5reet

~~MA00028~~ 5reet

~~MA00029~~ 5reet

~~MA00030~~ 5reet

~~MA00031~~ 5reet

~~MA00032~~ 5reet

~~MA00033~~ 5reet

~~MA00034~~ 5reet

~~MA00035~~ 5reet

~~MA00036~~ 5reet

~~MA00037~~ 5reet

~~MA00038~~ 5reet

~~MA00039~~ 5reet

~~MA00040~~ 5reet

~~MA00041~~ 5reet

~~MA00042~~ 5reet

~~MA00043~~ 5reet

~~MA00044~~ 5reet

~~MA00045~~ 5reet

~~MA00046~~ 5reet

~~MA00047~~ School

~~MA00048~~ School

~~MA00049~~

~~MA00050~~ 9re Street

~~MA00051~~ 9re Street

~~MA00052~~ 9re Street

W0000002 22 Street
W0000003 23 Street
W0000004 24 Street
W0000005 25 Street
W0000006 26 Street
W0000007 27 Street
W0000008 28 Street
W0000009 29 Street
W0000010 30 Street
W0000011 31 Street
W0000012 32 Street
W0000013 33 Street
W0000014 34 Street
W0000015 35 Street
W0000016 36 Street
W0000017 37 Street
W0000018 38 Street
W0000019 39 Street
W0000020 40 Street
W0000021 41 Street
W0000022 42 Street
W0000023 43 Street
W0000024 44 Street
W0000025 45 Street
W0000026 46 Street
W0000027 47 Street
W0000028 48 Street
W0000029 49 Street
W0000030 50 Street
W0000031 51 Street
W0000032 52 Street
W0000033 53 Street
W0000034 54 Street
W0000035 55 Street
W0000036 56 Street
W0000037 57 Street
W0000038 58 Street
W0000039 59 Street
W0000040 60 Street
W0000041 61 Street
W0000042 62 Street
W0000043 63 Street
W0000044 64 Street
W0000045 65 Street
W0000046 66 Street
W0000047 67 Street
W0000048 68 Street
W0000049 69 Street
W0000050 70 Street
W0000051 71 Street
W0000052 72 Street
W0000053 73 Street
W0000054 74 Street
W0000055 75 Street
W0000056 76 Street
W0000057 77 Street
W0000058 78 Street
W0000059 79 Street
W0000060 80 Street
W0000061 81 Street
W0000062 82 Street
W0000063 83 Street
W0000064 84 Street
W0000065 85 Street
W0000066 86 Street
W0000067 87 Street
W0000068 88 Street
W0000069 89 Street
W0000070 90 Street
W0000071 91 Street
W0000072 92 Street
W0000073 93 Street
W0000074 94 Street
W0000075 95 Street
W0000076 96 Street
W0000077 97 Street
W0000078 98 Street
W0000079 99 Street
W0000080 100 Street
W0000081 101 Street
W0000082 102 Street
W0000083 103 Street
W0000084 104 Street
W0000085 105 Street
W0000086 106 Street
W0000087 107 Street
W0000088 108 Street
W0000089 109 Street
W0000090 110 Street
W0000091 111 Street
W0000092 112 Street
W0000093 113 Street
W0000094 114 Street
W0000095 115 Street
W0000096 116 Street
W0000097 117 Street
W0000098 118 Street
W0000099 119 Street
W0000100 120 Street
W0000101 121 Street
W0000102 122 Street
W0000103 123 Street
W0000104 124 Street
W0000105 125 Street
W0000106 126 Street
W0000107 127 Street
W0000108 128 Street
W0000109 129 Street
W0000110 130 Street
W0000111 131 Street
W0000112 132 Street
W0000113 133 Street
W0000114 134 Street
W0000115 135 Street
W0000116 136 Street
W0000117 137 Street
W0000118 138 Street
W0000119 139 Street
W0000120 140 Street
W0000121 141 Street
W0000122 142 Street
W0000123 143 Street
W0000124 144 Street
W0000125 145 Street
W0000126 146 Street
W0000127 147 Street
W0000128 148 Street
W0000129 149 Street
W0000130 150 Street
W0000131 151 Street
W0000132 152 Street
W0000133 153 Street
W0000134 154 Street
W0000135 155 Street
W0000136 156 Street
W0000137 157 Street
W0000138 158 Street
W0000139 159 Street
W0000140 160 Street
W0000141 161 Street
W0000142 162 Street
W0000143 163 Street
W0000144 164 Street
W0000145 165 Street
W0000146 166 Street
W0000147 167 Street
W0000148 168 Street
W0000149 169 Street
W0000150 170 Street
W0000151 171 Street
W0000152 172 Street
W0000153 173 Street
W0000154 174 Street
W0000155 175 Street
W0000156 176 Street
W0000157 177 Street
W0000158 178 Street
W0000159 179 Street
W0000160 180 Street
W0000161 181 Street
W0000162 182 Street
W0000163 183 Street
W0000164 184 Street
W0000165 185 Street
W0000166 186 Street
W0000167 187 Street
W0000168 188 Street
W0000169 189 Street
W0000170 190 Street
W0000171 191 Street
W0000172 192 Street
W0000173 193 Street
W0000174 194 Street
W0000175 195 Street
W0000176 196 Street
W0000177 197 Street
W0000178 198 Street
W0000179 199 Street
W0000180 200 Street
W0000181 201 Street
W0000182 202 Street
W0000183 203 Street
W0000184 204 Street
W0000185 205 Street
W0000186 206 Street
W0000187 207 Street
W0000188 208 Street
W0000189 209 Street
W0000190 210 Street
W0000191 211 Street
W0000192 212 Street
W0000193 213 Street
W0000194 214 Street
W0000195 215 Street
W0000196 216 Street
W0000197 217 Street
W0000198 218 Street
W0000199 219 Street
W0000200

~~E0607667~~ Cockwell Street
~~E0607659~~ Walk
~~E0607641~~ Stas's Church
~~E0607641~~ 191
~~E0607639~~ Street
~~E0607635~~ H5
~~E0607633~~ Street
~~E0607625~~ 8's Site
~~E0607622~~ 32
~~E0607620~~ 30
~~E0607618~~ 28 Street
~~E0607617~~ 17 Site
~~E0607616~~ 16
~~E0607614~~ Field, Sheepen
~~E0607608~~ 8 North Hill
~~E0607604~~ 4 North Hill
~~E0607601~~ Stas's Church
~~E0607597~~ k
~~E0607593~~ k
~~E0607590~~ k
~~E0607584~~ Street
~~E0607575~~ Road
~~E0607571~~ Road
~~E0607560~~ Sand Pit
~~E0607559~~ 29 Road
~~E0607550~~ 20 Road
~~E0607540~~ 1 Road
~~E0607530~~ 3
~~E0607526~~ Road
~~E0607522~~ Wooden Tumulus
~~E0607520~~ Road
~~E0607516~~ Field Road
~~E0607513~~ 3 Court
~~E0607509~~ Barracks
~~E0607508~~ 87nty Hospital
~~E0607505~~ 5on Road
~~E0607504~~ Hill
~~E0607502~~ Road
~~E0607501~~ Road
~~E0607500~~ 6unty Hospital
~~E0607496~~ 6e
~~E0607490~~ Road
~~E0607483~~ Lane
~~E0607482~~ Lane
~~E0607481~~ Lane
~~E0607480~~ Lane
~~E0607478~~ Lane
~~E0607476~~ Lane
~~E0607475~~ Lane

~~BU4000~~45 Street
~~BU4000~~7 Edge Road
~~BU4000~~52 Walk
~~BU4000~~18
~~BU4000~~92 Railway Station +I1303
~~BU4000~~77 de' garden
~~BU4000~~78 de garden, S of West Lodge
~~BU4000~~7 Road
~~BU4000~~75 West Lodge
~~BU4000~~74 per's Garden
~~BU4000~~35 Road
~~BU4000~~73 House
~~BU4000~~7 North Bridge
~~BU4000~~7 Road
~~BU4000~~28 Road
~~BU4000~~25 Street
~~BU4000~~25 erters, Abbey Field
~~BU4000~~62 Lodge
~~BU4000~~62 Road
~~BU4000~~61 Football Pitch
~~BU4000~~61 Military Hospital
~~BU4000~~61 Military Hospital
~~BU4000~~6 Road
~~BU4000~~67 ouse
~~BU4000~~65
~~BU4000~~63 m cemetery, Beverley Road

~~RD0000~~57burials, Sheepen
~~RD0001~~NE or Everett's Brickyard
~~RD0002~~an, Butt Road
~~RD0003~~2RGS
~~RD0004~~on, St John's Church
~~RD0005~~on, West Lodge
~~RD0006~~2, Butt Road
~~RD0007~~on, Sheepen
~~RD0008~~on, Union
~~RD0009~~on, Maldon Road
~~RD0010~~56cent
~~RD0011~~Gunton Lodge
~~RD0012~~g and Horses PH
~~RD0013~~1 Lane
~~RD0014~~9 Butt Road
~~RD0015~~Road
~~RD0016~~184ation Road
~~RD0017~~Road
~~RD0018~~ate Road
~~RD0019~~7per Street
~~RD0020~~Road
~~RD0021~~Yard
~~RD0022~~on Road
~~RD0023~~Road
~~RD0024~~ad
~~RD0025~~street
~~RD0026~~sfield Avenue
~~RD0027~~dge Road
~~RD0028~~3dge Road
~~RD0029~~Valley
~~RD0030~~7Road
~~RD0031~~ath Road
~~RD0032~~Road
~~RD0033~~rees
~~RD0034~~er Close
~~RD0035~~rst Road
~~RD0036~~a Road
~~RD0037~~05
~~RD0038~~Road
~~RD0039~~Road
~~RD0040~~rive
~~RD0041~~Water Offices
~~RD0042~~playing field
~~RD0043~~3
~~RD0044~~on Place
~~RD0045~~1st Road
~~RD0046~~Quay

~~BNH073~~ Bath Road
~~BNH083~~ Avenue
~~BNH087~~ n Square
~~BNH097~~ Road
~~BNH095~~ Way
~~BNH057~~ Road
~~BNH297~~ her Bottle PH
~~BNH027~~ Marriage Road
~~BNH093~~ s Brickyard
~~BNH036~~ Fields, football pitch
~~BNH040~~ Road
~~BNH060~~ d's Close
~~BNH049~~ Road
~~BNH020~~ Street
~~BNH290~~ Marriage Road

~~BNH030~~ Road
~~BNH070~~ eld Close
~~BNH127~~ Road
~~BNH532~~ Road
~~BNH527~~ Road
~~BNH278~~ Road
~~BNH097~~
~~BNH080~~ irst Road
~~BNH560~~imming Pool
~~BNH257~~ Road
~~BNH075~~ s Brickyard
~~BNH070~~ Road
~~BNH050~~ Gate
~~BNH040~~ d Way
~~BNH042~~ y Road
~~BNH035~~ rowe Road
~~BNH070~~ inic's Road
~~BNH025~~ 5
~~BNH030~~ Way
~~BNH040~~ Street
~~BNH065~~ Road
~~BNH060~~ Road
~~BNH015~~ y Avenue
~~BNH060~~ Avenue
~~BNH280~~ w Road
~~BNH290~~ Gardens
~~BNH060~~ Road
~~BNH048~~ Road
~~BNH027~~
~~BNH020~~ Close
~~BNH007~~ ol F23s
~~BNH090~~ Road
~~BNH520~~imming Baths

~~BN000000~~an Road
~~BN000000~~ad
~~BN000000~~h Road
~~BN000000~~et
~~BN000000~~Station Roundabout
~~BN000000~~Brickyard
~~BN000000~~ad
~~BN000000~~gh Court
~~BN000000~~ngoven
~~BN000000~~mp bank
~~BN000000~~old Road
~~BN000000~~
~~BN000000~~oad
~~BN000000~~oad
~~BN000000~~oad
~~BN000000~~ach House
~~BN000000~~oad
~~BN000000~~oad
~~BN000000~~street
~~BN000000~~ation
~~BN000000~~43Barracks
~~BN000000~~oad
~~BN000000~~ise
~~BN000000~~ndump
~~BN000000~~oad
~~BN000000~~oad
~~BN000000~~oad
~~BN000000~~oad
~~BN000000~~oad
~~BN000000~~42Barracks
~~BN000000~~41Barracks
~~BN000000~~7Barracks
~~BN000000~~8Barracks
~~BN000000~~4Folley
~~BN000000~~oad
~~BN000000~~ge Road
~~BN000000~~burgh Street
~~BN000000~~oad
~~BN000000~~oad
~~BN000000~~6T
~~BN000000~~6T
~~BN000000~~6T
~~BN000000~~6T
~~BN000000~~6
~~BN000000~~oad
~~BN000000~~Way
~~BN000000~~oad
~~BN000000~~Works
~~BN000000~~ur Cemetery
~~BN000000~~oad

~~BL00000000~~ Road
~~BL00000001~~ Benham House
~~BL00000002~~ Terrace
~~BL00000003~~
~~BL00000004~~
~~BL00000005~~
~~BL00000006~~
~~BL00000007~~
~~BL00000008~~
~~BL00000009~~ Philip's Vicarage
~~BL00000010~~ Philip's Vicarage
~~BL00000011~~ Philip's Vicarage
~~BL00000012~~ Philip's Vicarage
~~BL00000013~~ Road
~~BL00000014~~ Green School
~~BL00000015~~ Road
~~BL00000016~~ Road
~~BL00000017~~ Road
~~BL00000018~~ Road
~~BL00000019~~
~~BL00000020~~ cent
~~BL00000021~~ cent
~~BL00000022~~ Field, nr Camp Post Office
~~BL00000023~~ Road
~~BL00000024~~ Road
~~BL00000025~~ County Hospital
~~BL00000026~~
~~BL00000027~~
~~BL00000028~~ Road
~~BL00000029~~ Avenue
~~BL00000030~~ Lodge
~~BL00000031~~ Lodge
~~BL00000032~~ Sports Field
~~BL00000033~~ Barracks
~~BL00000034~~ Road
~~BL00000035~~ Road
~~BL00000036~~ ue
~~BL00000037~~ Street
~~BL00000038~~ ue
~~BL00000039~~ ue
~~BL00000040~~ net
~~BL00000041~~ Road
~~BL00000042~~ Field
~~BL00000043~~ ue

~~BL00000044~~ Avenue
~~BL00000045~~ Road
~~BL00000046~~ Road
~~BL00000047~~ Road
~~BL00000048~~ Road
~~BL00000049~~ Road

Barracks
Grange
Road
Road
Road
Road
Road
Road
Road
Road
Road
Road
Road
Road
Road
Road
House
House
House
Walk
Walk
Street
Road
Rd
Road
cent
cent
cent
cent
cent
cent
cent
cent
cent
cent
cent
cent
bridge
Cemetery
Cemetery
Cemetery
Brickyard
Stone Walk
Old Road
Munn Barracks
Street
Avenue
Street
Road
Ground
Road
Barracks
Road
Square
Lodge Road
Avenue
Sum?

~~1990169~~um?

~~1990169~~um?

~~1990169~~

plot

cultivation

plot

cultivation

plot

cultivation

~~1990169~~reet

~~1990169~~reet

~~1990169~~reet

~~1990169~~

~~1990169~~1, perimeter ditch?

~~1990169~~street

~~1990169~~Hill

~~1990169~~Hill

~~1990169~~Hill

~~1990169~~Hill

~~1990169~~219

~~1990169~~217

~~1990169~~220

~~1990169~~214

~~1990169~~212

~~1990169~~213

~~1990169~~211

~~1990169~~218

~~1990169~~defensive ditch

~~1990169~~street

~~1990169~~Hill

~~1990169~~Hill

~~1990169~~ditch

~~1990169~~55

~~1990169~~3

~~1990169~~4

~~1990169~~200Approach Road

~~1990169~~camp ditch'

~~1990169~~018

~~1990169~~Street Bus Station

~~1990169~~Gardens

~~1990169~~gach site

~~1990169~~99

~~1990169~~playing fields

~~1990169~~playing fields

~~1990169~~playing fields

~~1990169~~M0Munn Barracks

R318119M1 Munn Barracks
R318112M2 Munn Barracks
R31810099 Institute
R31811010 Benham House
R318117106 Street
R318117112
R318117121
R318117122
R31811413 Street
R31811413 Street
R31811613 Street
R31811616
R318112M3 Munn Barracks
R318109100 Lagach house
R318119136 Rectory
R318115152 Lane
R318115150 Lane
R318107178 St Road
R318107179's Field, Lexden
R318107180's Field, Lexden
R3181111253
R3181001 Relief Road, Southway
R31810717 Street
R31810317 Street
R31810318 Exchange site
R31810717 Street
R318107177
R318107173re Street
R31810017 Street
R31810015 Burgh Street
R3181001 Walk
R31810016 Street
R31810115 Street
R31810018 Street
R318101181 National Bus Depot
R31810315 All
R318100120 Walk
R318100121 Street, wall arch
R318104112
R318101114 Park
R318100120
R318100128 Street
R318107127 Park
R31810014 Castle
R318107128 Street
R318100126 Street
R318100127 Park
R318107125 Bus Station

R19M675 Street
 R19M685 Street
 R19M688 Street
 R19M697 Street
 R19M658 Street
 R19M685 Street
 R19M688 Street
 R19M695 Street
 R19M683 precinct wall of the Temple of Claudius
 R19M695 Street
 R19M685 Street
 R19M694 k
 R19M615 House
 R19M685 Street
 R19M685 Street
 R19M685 Street
 R19M684 of the precinct wall of the Temple of Claudius
 R19M689 Exchange site
 R19M695 k Church
 R19M628 Street
 R19M689 School
 R19M655 Street
 R19M629 Street
 R19M655 Street
 R19M694 Gardens
 R19M657 of the precinct wall of the Temple of Claudius
 R19M681
 R19M685 Street
 R19M686 St, wall arch,
 R19M687 k
 R19M689 29e St, wall arch
 R19M686 Church, wall arch
 R19M686 St, wall arch
 R19M685 Street
 R19M685 Street
 R19M689 School
 R19M685
 R19M628 Street
 R19M628 Street
 R19M628 Street
 R19M689 School
 R19M686 Hill
 R19M628 Street
 R19M628 Street
 R19M659 Hill
 R19M645 Hill
 R19M657 Lane
 R19M685 Street

~~BNM1153~~ Borough
~~BNM1157~~ Hill
~~BNM1158~~ Hill
~~BNM1158~~ Dyke
~~BNM1159~~ Dyke, County High School for Girls
~~BNM1160~~ House
~~BNM1161~~ L-pine
~~BNM1162~~ Dpits R
~~BNM1163~~ Street
~~BNM1164~~ Road
~~BNM1165~~ National North Station Road
~~BNM1166~~ Middleborough
~~BNM1167~~ Han's Grove
~~BNM1168~~ St Excavation 1988-9
~~BNM1169~~ Approach Rd (Tr 15)
~~BNM1170~~ Gate Street
~~BNM1171~~ Park greenhouse
~~BNM1172~~ Sheepen
~~BNM1173~~ 25
~~BNM1174~~ 15
~~BNM1175~~ 07
~~BNM1176~~ Street
~~BNM1177~~ Street
~~BNM1178~~ 05
~~BNM1179~~ Hall Church
~~BNM1180~~ 1980
~~BNM1181~~ 06
~~BNM1182~~ 39
~~BNM1183~~ 38
~~BNM1184~~ 40
~~BNM1185~~ 41
~~BNM1186~~ Exchange Office
~~BNM1187~~ 24
~~BNM1188~~ 45
~~BNM1189~~ 45
~~BNM1190~~ 45
~~BNM1191~~ Gate
~~BNM1192~~ 35, East Hill
~~BNM1193~~ Gate
~~BNM1194~~ Gate (St Botolph's Gate)
~~BNM1195~~ 0re
~~BNM1196~~ palisaded trench at Sheepen
~~BNM1197~~ Gate, Head Street
~~BNM1198~~ Ground
~~BNM1199~~ Street
~~BNM1200~~ Lang
 site
 hearth

~~BLM1167~~hool

~~BLM1167~~Hill

~~BLM1186~~et

~~BLM1188~~et

~~BLM1187~~et

~~BLM1188~~

~~BLM1194~~

~~BLM1210~~et

~~BLM1167~~Lane

~~BLM1167~~hool

~~BLM1165~~hool

~~BLM1165~~hool

~~BLM1189~~et

~~BLM1197~~heatre

~~BLM1192~~

~~BLM1161~~te Court

~~BLM1161~~ard

~~BLM1164~~Gardens

~~BLM1163~~Gardens

~~BLM1163~~dge, garden

~~BLM1163~~ossible bath house

~~BLM1163~~Exchange Site

~~BLM1163~~Park

~~BLM1148~~street

~~BLM1141~~Munn Barracks

~~BLM1166~~re Street

~~BLM1186~~et

~~BLM1165~~street—East Hill

~~BLM1161~~ories

~~BLM1161~~ite

~~BLM1161~~site

~~BLM1161~~site

~~BLM1161~~site

~~BLM1161~~site

~~BLM1161~~hool

~~BLM1161~~lane

~~BLM1161~~riact

~~BLM1161~~riact

~~BLM1161~~riact

~~BLM1161~~riact

~~BLM1161~~hool

~~BLM1161~~ical

~~BLM1161~~ical

~~BLM1161~~ical

~~BLM1161~~hill

~~BLM1161~~hill

~~BLM1161~~riact Bus Station

~~BM 11679111~~

~~BM 11680111~~

~~BM 11681111~~

~~BM 11682111~~

~~BM 11683111~~

~~BM 11684111~~

~~BM 11685111~~

~~BM 11686111~~

~~BM 11687111~~

~~BM 12571~~

~~BM 12581~~

~~BM 12591~~

~~BM 12591~~

~~BM 12591~~

~~BM 12591~~

~~BM 12591~~

~~BM 12591~~ Tree Family Centre

~~BM 12591~~ tion

~~BM 12591~~, Sheepen

~~BM 12591~~ (man skull fragments)

~~BM 12591~~

~~BM 12591~~

R19183906
 R19183907
 R19183908
 R19183909
 R19183910
 R19183911
 R19183912
 R19183913
 R19183914
 R19183915
 R19183916
 R19183917
 R19183918
 R19183919
 R19183920
 R19183921
 R19183922
 R19183923
 R19183924
 R19183925
 R19183926
 R19183927
 R19183928
 R19183929
 R19183930
 R19183931
 R19183932
 R19183933
 R19183934
 R19183935
 R19183936
 R19183937
 R19183938
 R19183939
 R19183940
 R19183941
 R19183942
 R19183943
 R19183944
 R19183945
 R19183946
 R19183947
 R19183948
 R19183949
 R19183950
 R19183951
 R19183952
 R19183953
 R19183954
 R19183955
 R19183956
 R19183957
 R19183958
 R19183959
 R19183960
 R19183961
 R19183962
 R19183963
 R19183964
 R19183965
 R19183966
 R19183967
 R19183968
 R19183969
 R19183970
 R19183971
 R19183972
 R19183973
 R19183974
 R19183975
 R19183976
 R19183977
 R19183978
 R19183979
 R19183980
 R19183981
 R19183982
 R19183983
 R19183984
 R19183985
 R19183986
 R19183987
 R19183988
 R19183989
 R19183990
 R19183991
 R19183992
 R19183993
 R19183994
 R19183995
 R19183996
 R19183997
 R19183998
 R19183999

~~B16115929~~ ~~Bluebonnet~~ Tree Family Centre

PL 106-241 House

814598 Road

Blount Road

POLYMERIZATION

BLANCHARD

PL0749412 and

~~Blanchard~~
~~Blanchard~~ Street

~~BL 1017006~~, Sabraon Barracks

Esplanade Road

81-0991 Street

BL955748 **off**, Burlington Road

~~RENTS~~ live

~~FOIA b 7(D)~~rive

M6987 The River Colne, N. of Sheepen

~~W1628705~~ Field, Sheepen

~~BL09N018~~ Lane

~~RM687051~~

BRICKS Street (Brick kiln)

BLN456 (kiln enclosure)

~~RECEIVED~~

~~168735~~

~~REDACTED~~ rough

~~141810~~ 821ter Road

~~REVEREND~~ Alter Road

RIGHTS 48 School

~~RIGHTS~~ 49 School

~~MONTEFIELD~~

ENF0023 Enfield Railway Station Car Park (kiln furniture)

~~REMOVED~~ The Walk(kiln waste)

Page 47 School

BLRSD58ve

FIGURE 38 Colne Bank

El Dorado County Hospital

Ward 10 Field, Sheepen

MONITOR Field, Sheepen

~~REF ID: A9018~~

~~B1681920~~

Field, Sheepen

~~W16769~~ Field, Sheepen

165188 Court Road

1608178open

W108703 Field, Sheepen

~~WENT~~ 04 Field, Sheepen

~~BL028636~~

BONUS! 21 This Ground

100119 Lane

RI628352

MON49
N6765 Field, Sheepen
N6766 44e
N6766 46e
N6766 45e
N6769 55
N6773 53
N6774 54
N6777 Lodge Farm
N6778 44 School
N6759 73 Rectory
N6787 61
N6784 64 Road
N6769 85
N6767 98 Road
N6767 Hotel
N6763 35 fortress
N6763 3r's Street
N6766 1970
N6766 1/6 Road
N6767 CBS 4-5
N6769 8/8 Tee Family Centre
N6768 92 Theatre, St John's Street
N6767 21 House
N6767 29a Inn PH
N6763 3 Street
N6767 5 Street
N6766 6on Hotel
N6767 5e
N6767 4 Hill
N6766 40 Vicarage Garden
N6766 42 Hill
N6767 7 Hill
N6767 7 Hill
N6767 4ar PH
N6768 82
N6766 6 Hill
N6767 2 Long Wire Street
N6766 59 Spencer's, High Street
N6766 52 Yard
N6768 51 Hill
N6766 34 Spencer's, High Street
N6766 15 Theatre
N6766 52ation Road
N6766 5a Yard
N6766 4 Theatre
N6766 26 7ria Inn
N6766 23 1resite

~~BU930003~~ site

~~BU930004~~ site

~~BU930005~~ site

~~BU930006~~ site

~~BU930007~~ site

~~BU930008~~ site

~~BU930009~~ site

~~BU930010~~ site

~~BU930011~~ site

~~BU930012~~ site

~~BU930013~~ site

~~BU930014~~ site

~~BU930015~~ site

~~BU930016~~ site

~~BU930017~~ site

~~BU930018~~ site

~~BU930019~~ site

~~BU930020~~ site

~~BU930021~~ site

~~BU930022~~ open

site

~~BU930023~~ site

~~BU930024~~ site

~~BU930025~~ site

~~BU930026~~ site

~~BU930027~~ site

~~BU930028~~ site

~~BU930029~~ site

~~BU930030~~ school

~~BU930031~~ school

~~BU930032~~ school

~~BU930033~~ school

~~BU930034~~ hill

~~BU930035~~ lane

~~BU930036~~ Hill

~~BU930037~~ school

~~BU930038~~ Gardens

~~BU930039~~ Gardens

~~BU930040~~ Gardens

~~BU930041~~ field, Sheepen

~~BU930042~~ Munn Barracks

~~BU930043~~ k

~~BU930044~~ Hill

~~BU930045~~ Hill

~~BU930046~~ Hill

~~BU930047~~ Hill

~~BU930048~~ Hill

~~BU930049~~ ton Lodge

~~BU930050~~

189058 Gardens
 189088 Gardens
 189118 Gardens
 189186 Gardens
 189231 galgach House
 189311 43
 189316 2
 189346 3
 189366 3
 189366 4
 189394's Rectory
 189518 Station Road
 189571 Centre, County Hospital
 189583 Street
 189586 National Bus Depot
 189597 Rockwell Street
 189678 Edge Road
 189704 Road
 189864 Road
 189909 Road
 189966 Road
 189976 e Gardens
 189990
 189997 Park
 189999 Park
 189999 Pieter Institute
 189999 Road
 189999 Dunton Lodge
 189999 Post Office
 189999 Road
 189999 Nursery
 189999 ar Park, Nunn's Road
 189999 Road
 189999 galgach House
 189999 y Road
 189999 Road
 189999 Street
 189999 Road
 189999 Park
 189999 ed Friars
 189999 Street
 189999 Brickyard
 189999 Street
 189999 Gardens
 189999 School
 189999 Relief Road, Southway
 189999 McMunn Barracks
 189999 145
 189999 City Home, Lexden Road
 189999 e Gardens

~~PO10002~~

~~PO10004~~4s Hospital

~~PO10014~~'s Rectory

~~PO10050~~00

~~PO10060~~47 Temple of Claudius

~~PO10067~~ Road

~~PO10089~~9 Avenue

~~PO10089~~4 Hester Railway Station

~~PO10090~~8 Tumulus

~~PO10091~~2 Road

~~PO10093~~9 Drive

~~PO10093~~13, Lexden Road

~~PO10094~~08 Road

~~PO10095~~0s Road

~~PO10097~~17n Road

~~PO10097~~11 Street

~~PO10097~~17n Road

~~PO10097~~18 Street

~~PO10097~~19d Road

~~PO10097~~19el Street

~~PO10099~~1win Road

~~PO10099~~12n Road

~~PO10099~~13 Road

~~PO10099~~13 Road

~~PO10099~~13st Road

~~PO10099~~14ter Road

~~PO10099~~18 Road

~~PO10099~~18 Cinema, Crouch Street

~~PO10099~~18me Walk

~~PO10099~~18me Walk

~~PO10099~~18dens', Colchester

~~PO10099~~18dens', Lexden Road

~~PO10099~~18dens', Lexden Road

~~PO10099~~18re Road

~~PO10099~~173

~~PO10099~~18 Gate Steps

~~PO10099~~18 Grounds

~~PO10099~~18 Grounds

~~PO10099~~18 Street

~~PO10099~~17 Lane

~~PO10099~~18 George Road

~~PO10099~~18 Road

~~PO10099~~18n Road

~~PO10099~~18 House

~~PO10099~~18 Road

~~PO10099~~172nr River Colne

~~PO10099~~18 of the Temple of Claudius

~~PO10099~~18 Bane

BS-9034718k

MGN288 Fortress

14 Fortress Annexe

Mountain Town Wall

~~PCN 4079~~ found in Mr Brown's garden, 40(?) Crowhurst Road

~~22.1.1~~ 22.1.2 Street Car Park

~~RECEIVED~~ Righted Prettygate Dyke

~~89-019245~~ Hill

REGN384 Colchester to London Road

RG179 Road

~~Big~~ 791 Road

Ridgeway Hill to Colne

Return to Colchester

R24188 21st-west Gate

~~20688-86~~ Hill running SW-NE

~~RECEIVED~~ 1999 North Gate

MGN-48 Sheepen Dyke entrance

PHOTO 47's Gate?

~~CONFIDENTIAL~~ 46 House

~~2943113~~ 4 Fitzwalter Road

~~CONFIDENTIAL~~ County Hospital

~~SECRET~~39

BÖLÜM 42:den Tumulus

FIGURE 14-5 Duncan's Gate

BLANK, W. of Colonia

~~REF ID: A65783~~ 38

1
RND 325r Street

RND321 lane. (part of voussoir)

REINOLD & Reinolds'

RENTAL Roads?

~~BLONDIN~~ Hop (Insula 19)

MONSIEUR HOP, Curry's, High Street

~~10019~~ 10019 Balcerne Lane

~~REDACTED~~ County Hospital, Lexden Road

~~PO BOX 101~~ Queen's Rd, 1844 (Jupiter)

~~SECRET~~35

~~SECRET~~15

~~CONFIDENTIAL~~42

09-01118-35

89-604043

~~09-020946~~

09-087634

REF ID: A784

89-0056161

REC'D N803

PLDN802

~~09-0201807~~

PLDN14

~~WTON~~696
~~WTON~~740
~~WTON~~520
~~WTON~~45
~~WTON~~00
~~WTON~~25
~~WTON~~44
~~WTON~~278
~~WTON~~59
~~WTON~~73
~~WTON~~61
~~WTON~~92
~~WTON~~13
~~WTON~~57
~~WTON~~28
~~WTON~~89
~~WTON~~62
~~WTON~~39
~~WTON~~29
~~WTON~~50
~~WTON~~44
~~WTON~~30
~~WTON~~10
~~WTON~~66
~~WTON~~49
~~WTON~~20
~~WTON~~10
~~WTON~~90
~~WTON~~97
~~WTON~~521
~~WTON~~48
~~WTON~~06
~~WTON~~49
~~WTON~~09
~~WTON~~52
~~WTON~~769
~~WTON~~64
~~WTON~~39
~~WTON~~30
~~WTON~~37
~~WTON~~574
~~WTON~~75
~~WTON~~17
~~WTON~~93
~~WTON~~41
~~WTON~~74
~~WTON~~31
~~WTON~~34

[illegible]

~~R99M0001956~~rc Street
~~R99M0001956~~rc Street
~~R99M0441~~pavement
~~R99M0451~~pavement
~~R99M0631~~gla Street
~~R99M0721~~partment
~~R99M0761~~partment
~~R99M0852~~prell Street
~~R99M0861~~pavement
~~R99M0448~~padement
~~R99M0450~~ditprv Road
~~R99M0451~~ditprv Road
~~R99M0661~~ Savenent
~~R99M0764~~lousment
~~R99M0451~~pavement
~~R99M0451~~pavement
~~R99M0451~~re Street
pavement
~~R99M0451~~pavement
~~R99M0670~~ Station
~~R99M0670~~ Station Queen Street
~~R99M0451~~getvement
~~R99M0451~~agvement
~~R99M0761~~Sp Gruncht
~~R99M0451~~pretment
~~R99M0451~~pretment
~~R99M0661~~pavement
~~R99M0451~~getvement
~~R99M0451~~getvement
~~R99M0451~~getvement
~~R99M0451~~getv Bure Garage
~~R99M0451~~Yardment
~~R99M0451~~quvement
~~R99M0451~~pavement
~~R99M0451~~Wlkment
~~R99M0451~~Wlkment
~~R99M0451~~pl Hahent
~~R99M0451~~Chvment
~~R99M0451~~Chvmentnd
~~R99M0451~~herement
~~R99M0451~~Ractoyent
~~R99M0451~~Ractoyent
~~R99M0451~~Roudment
~~R99M0451~~ll Streetment
~~R99M0451~~lment
~~R99M0451~~lment
~~R99M0451~~lment
~~R99M0451~~lment

RISW07621 pavement
RISW07620 pavement
RISW07619 pavement
RISW07618 pavement
RISW07617 pavement
RISW07616 pavement
RISW07615 pavement
RISW07614 pavement
RISW07613 paved (not plotted)
RISW07612 pavement
RISW07611 pavement
RISW07610 paved Street
RISW07609 paved Street
RISW07608 Accident
RISW07607 Accident
RISW07606 Cottage
RISW07605 pavement
RISW07604 pavement
RISW07603 Rectory site
RISW07602 pavon Office
RISW07601 pavement
RISW07599 pavement
RISW07598 pavement
RISW07597 pavement
RISW07596 pavement
RISW07595 pavement
RISW07594 pavement
RISW07593 Road
RISW07592 pavement
RISW07591 Pavement
RISW07590 pavement
RISW07589 pavement
RISW07588 pavement
RISW07587 pavement
RISW07586 Road
RISW07585 Church?
RISW07584 Bargh Street
RISW07583
RISW07582
RISW07581 Lxden
RISW07580 Lxden
RISW07579
RISW07578 Lodge Farm
RISW07577(carved head of a woman)
RISW07576 Road
RISW07575 Lxden Road
RISW07574 Road
RISW07573 Hill (fragment)
RISW07572 Abbey Wall

~~W101016~~161g
~~W101016~~162 Road, (Longinus)
~~W101016~~167 Road (Facilis)
~~W101016~~168
~~W101016~~169 Colchester Hospital
~~W101016~~171 Lexden Road
~~W101016~~172 Road
~~W101016~~170
~~W101016~~171a Gath R
~~W101016~~171a, Lexden Road
~~W101016~~173 Cottage
~~W101016~~175
~~W101016~~175 School
~~W101016~~174 School
~~W101016~~174
~~W101016~~174 Press Site
~~W101016~~173 Hill House
~~W101016~~173 trees, High Street
~~W101016~~177et
~~W101016~~177et 25
~~W101016~~177 Road
~~W101016~~179 9b
~~W101016~~172 Road
~~W101016~~177et
~~W101016~~177et
~~W101016~~179
~~W101016~~179
~~W101016~~179 Street
~~W101016~~179et
~~W101016~~179d Gardens
~~W101016~~179dckwell Street
~~W101016~~179dckwell Street
~~W101016~~179dckwell St (foundation)
~~W101016~~179 & Griffin (foundation)
~~W101016~~179 & Griffin (foundation)
~~W101016~~179 foundations with hollow flue tile)
~~W101016~~179on Road (foundations)
~~W101016~~179 (foundations)
~~W101016~~179 Street (foundations)
~~W101016~~179 Street (foundations)
~~W101016~~179 Vicarage garden North Hill (foundations)
~~W101016~~179re Street
~~W101016~~179ockwell Street
~~W101016~~179ockwell Street
~~W101016~~179ockwell Street
~~W101016~~179 Exchange Site
~~W101016~~175
~~W101016~~179 Exchange Site

~~BN1105~~ Myre Street
~~BN11051k~~
~~BN1125~~ Street
~~BN11721l~~
~~BN1172~~ Theatre
~~BN11241~~
~~BN11322a~~ Inn PH
~~BN11341~~ Institute
~~BN11267a~~ Inn PH
~~BN1132~~ Theatre
~~BN11351~~ Gas Passage
~~BN11002~~ Bong Wire Street
~~BN11055~~ High Street
~~BN110094~~ ry Site
~~BN110055~~ Street
~~BN110058~~ Street
~~BN110701l~~
~~BN11068~~
~~BN110702~~ igh Street
~~BN110679~~ Street
~~BN110667~~ Spencers?
~~BN110656~~ Spencers?
~~BN110658~~ Spencers?
~~BN110073~~ Rectory site (S+J2309)
~~BN110071~~ Rectory site
~~BN110046~~ he Exchange
~~BN110637~~ age Queen Street
~~BN1106379~~ age Queen Street
~~BN110659~~ Street
~~BN110701~~ ire Street Arcade
~~BN110692~~ ire Street Arcade
~~BN110618~~ Street
~~BN110630~~ feet
~~BN110675~~ House
~~BN110630~~ feet
~~BN110612~~ Gardens
~~BN110630~~ Rectory site
~~BN110630~~ in College
~~BN110646~~ 1el
~~BN110676~~ Gardens
~~BN110672~~ Gardens
~~BN110673~~ Gardens
~~BN110674~~ Gardens
~~BN110675~~ Gardens
~~BN110676~~ 7k
~~BN110676~~ k
~~BN110676k~~
~~BN110676k~~

~~PL 97-116 Theatre~~

~~BA9MB924~~ Rectory site

1987 St. Nicholas's Church

090915065k

82-05121066k

106 Claudius Precinct

~~RECORDED~~ 1909 St Arcade

~~REAR 100~~ Gre St Arcade

RLIN 673 Beet

~~High Street~~
High Street

~~W. J. Griffin~~
W. J. Griffin & Griffin

~~RECEIVED~~ House

~~01000000~~ Street
~~01000000~~ Street Bus Station
~~01000000~~ Quarter
~~01000000~~ National Bus Depot
~~01000000~~ National Bus Depot
~~01000000~~ National Bus Depot
~~01000000~~ National Bus Depot
~~01000000~~ National Bus Depot
~~01000000~~ National Bus Depot
~~01000000~~ National Bus Depot
~~01000000~~ National Bus Depot
~~01000000~~ National Bus Depot
~~01000000~~ Gardens site
~~01000000~~ School Site
R11M1706 Stockwell Street
~~01000000~~
~~01000000~~
R11M1124 Lane
~~01000000~~ Street
~~01000000~~ Olds Street
~~01000000~~ Exchange Site
~~01000000~~ Exchange Site
R11M1101 Dad
Q11M1047 Street
~~01000000~~
~~01000000~~ High Street
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~ National Bus Depot
~~01000000~~ Exchange
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~
~~01000000~~ Bus Station
~~01000000~~ Bus Station
~~01000000~~ Bus Station
~~01000000~~ Bus Station
~~01000000~~ Street
~~01000000~~ Street
~~01000000~~ Street
~~01000000~~ Park
~~01000000~~ Park
~~01000000~~ Park

E010000004
 E01000004 Park
 E01000004 Garden Site
 E010000074 Garden Site (Insula 39)
 E010000072k, 1927/8
 E01000003 Park
 E010000027 Tree Family Centre
 E010000028
 E010000070 Park
 E010000088 Borough
 E010000050 Park
 E010000052 Park
 E010000053 Park
 E010000057 Park
 E010000052 Park
 E010000072 Park
 E010000071 Park
 E010000070 Park
 E010000051a Street
 E010000051b Street
 E010000051c Street
 E0100000108
 E0100000181 Street
 E0100000278k
 E010000046 Dairy
 E010000052 Bus Station
 E010000051t Bus Station
 E0100000162's Priory
 E0100000230a's Church
 E01000003 Street
 E01000001094e Street
 E010000037 Hill
 E0100000009y Site
 E0100000451st Road
 E010000052 Street
 E010000052a Street
 E010000050a Street
 E0100000545 Road
 E010000039 Hill
 E010000039yre Street
 E010000039yre Street
 E010000010 High Court
 E010000010 Street
 E0100000588ockwell Street
 E010000010 Street
 E0100000541 Hill
 E0100000542 Hill
 E0100000465n

02 Theatre
 01 Street
 02 Street
 09 ry Barracks, Butt Road
 07 Martin's House
 04 holas Church
 03 Memorial
 02 Road
 01 Dill
 00 Dill
 99 idge
 98 Station Road
 97 Station Road
 96 Cross Keys Inn
 95 ry's Cottage
 94 Hill
 93 Street
 92 Street
 91 Dill
 90 Street
 89 Gardens
 88 Lane
 87 Bus Garrage
 86 M4 Street
 85 Street
 84 Office
 83 Office
 82 Theatre
 81 Gate
 80 Saints Church
 79 ph's Street
 78 ins House
 77 % Church
 76 Street
 75 Street
 74 Street
 73 Hospital
 72 G Hospital
 71 Hospital
 70 las Church
 69 Dill
 68 Street
 67 Street
 66 Street
 65 Street
 64 Street
 63 Street
 62 Street
 61 Hospital
 60 Grounds

[illegible]

Gazetteer of early Saxon monuments, elements and finds from the study area

~~Expend~~ dres.

51
Bridgden Street

EN10181 Street
 EN10182 House
 EN10183 The Sand Pit
 EN10184 Road
 EN10185 Road
 EN10186 Cemetery
 EN10187 Road
 EN10188 Cemetery
 EN10189 Cemetery
 EN10190 Church
 EN10191 Churchyard
 EN10192 Street
 EN10193 Park
 EN10194 Peter
 EN10195 Hotel
 EN10196 Park, North Hill
 EN10197 Park
 EN10198 Hill)
 EN10199 High Street
 EN10200 NE circuit of town
 EN10201 Hill
 EN10202 Hill
 EN10203 Sea Road
 EN10204 Road
 EN10205 Lion Walk
 EN10206 Lion Walk
 EN10207 Street
 EN10208 Street
 EN10209 Street
 EN10210 Park, Nunn's Road
 EN10211 Hill
 EN10212 Hill
 EN10213 On corner of town
 EN10214 Lane
 EN10215 Light
 EN10216 Park, Nunn's Road
 EN10217 Road
 EN10218 Street
 EN10219 St John's Church
 EN10220 Hill
 EN10221 Hill
 EN10222 Hill
 EN10223 Hill
 EN10224 Exchange
 EN10225 Yard
 EN10226 Cottage
 EN10227 Collection
 EN10228 2nd shield boss, Colchester
 EN10229 Road, River Colne
 EN10230 River Colne
 EN10231 'Anglo-Saxon cemetery' nr Colchester
 EN10232 was found in Colchester
 EN10233 Road, Colchester

[illegible]

M060134s's Church (demolished)
 M060138Churchyard
 M060137Churchyard
 M060186Churchyard, Greenstead.
 M060138Churchyard
 M060122's Churchyard
 M060121Magdalens Churchyard
 M060139at the Walls Churchyard
 M060140's Church, Mile End (demolished)
 M060135's Churchyard
 M060137Churchyard
 M060188H's Graveyard
 M060192H of St Michael
 M060137ard's Churchyard+I2585
 M060190erplot
 M060189Way
 M060158Church
 M060179mer Bailey Ditch
 M060158street
 M060159street
 M060151h's Street
 M060191e Street Car Park
 M060192ools
 M060191e Street Car Park
 M060120Hill Fish Pond
 M060187onds
 M060120Gate, Museum Street
 M060107
 M060126, site of Medieval gateway
 M060186hop, North Hill
 M0601326k
 M060137nn
 M060166Road
 M060195l
 M060186al
 M060187street
 M060127ennies of Henry I – III, High Street
 M060184art, Magdalen Street
 M060195Hospital
 M060192k
 M060138the Crouched or Crutched Friars
 M060198Lane
 M060180Yard
 M060188 57 High Street
 M060193al
 M060190Hill, River Colne
 M060186medieval house and cellars at 48–49 High Street
 M06018474e at the Cups Hotel Site

~~MO00066~~ 66rly 30–32) East Stockwell Street

~~MO00067~~ 67the Greyfriars

~~MO00068~~ 68lital

~~MO00069~~ 69ionough

~~MO00070~~ 70ort

~~MO00071~~ 71ionough

~~MO00072~~ 72ionough

~~MO00073~~ 73ionough

~~MO00074~~ 74et

~~MO00075~~ 75rough

~~MO00076~~ 76rough

~~MO00077~~ 77rough

~~MO00078~~ 78rough

~~MO00079~~ 79rough

~~MO00080~~ 80rough

~~MO00081~~ 81rough

~~MO00082~~ 82rough

~~MO00083~~ 83rough

~~MO00084~~ 84et

~~MO00085~~ 85street

~~MO00086~~ 86de

~~MO00087~~ 87ites Lane

~~MO00088~~ 8863 Lane

~~MO00089~~ 89Road

~~MO00090~~ 90Graveyard

~~MO00091~~ 91rk

~~MO00092~~ 92H5

~~MO00093~~ 93rk

~~MO00094~~ 94rk

~~MO00095~~ 95rk

~~MO00096~~ 96H5

~~MO00097~~ 97School Site

~~MO00098~~ 98H5

~~MO00099~~ 99H5

~~MO00100~~ 100H5

~~MO00101~~ 101H5

~~MO00102~~ 102H5

~~MO00103~~ 103H5

~~MO00104~~ 104H5

~~MO00105~~ 105H5

~~MO00106~~ 106lanor

~~MO00107~~ 107Row

~~MO00108~~ 108ill, old mill now demolished

~~MO00109~~ 109ill

~~MO00110~~ 110ill, River Colne

~~MO00111~~ 111, River Colne

~~MO00112~~ 112, north of Lexden Bridge

~~MO00113~~ 113ill

MON1119
MON1150 Mill
MON1201 Mill Pond
MON1212 Lodge Farm Moat
MON1257 Jet
MON1370 Culver Street
MON1380 Culver Street
MON1415 Culver Street
MON1473 Butt Road
MON1536 Well
MON1575 Field Press site
MON1619 Street
MON1637 Park
MON1670 Park
MON1678 Borough
MON1680 Park
MON1711 Hill
MON1729 Rockwell Street
MON1735 Wire Street Co-op
MON1744 ns & Griffin
MON1756 Old
MON1758 Street
MON1759 Hill
MON1760 Group Mercury Theatre Evaluation
MON1768 The Hythe
MON1809 Hill
MON1825 from Stockwell Street
MON1856 Hall of St John's Abbey
MON1861 John's Priory
MON1869 Lead Road
MON1869 ad
MON1869 Road
MON1869 77 St Mary's Church
MON1890 John's Street
MON1910 Street
MON1910 Street
MON1917 Street
MON1949 Street
MON1961 Hill
MON1971k (Early Medieval Street)
MON1974 Gore Street
MON1989 Street
MON1989 Street
MON1989 56 East Street
MON1989 Street
MON1989 Rockwell Street
MON1989 Hill
MON1989 Rockwell Street

MON509 Street ('Bere Lane')
 MON510 West Stockwell Street
 MON511 South of Colne & Lexden Lodge (Moat) Farm
 MON512 South of Colne & Lexden Lodge (Moat) Farm
 MON513 South of Colne & Lexden Lodge (Moat) Farm
 MON514 South of Colne & Lexden Lodge (Moat) Farm
 MON515 Street
 MON516 Street
 MON517 Street
 MON518 Street
 MON519 Street
 MON520 Street
 MON521 Abbey
 MON522 Street
 MON523 Stockwell Street
 MON524 Abbey Grounds
 MON525 Cinema
 MON526
 MON527 Yard
 MON528 Yard
 MON529 Foot
 MON530 Street
 MON531 Street
 MON532 Street
 MON533 Hill
 MON534 Holy Well, Harwich Road
 MON535 Street
 MON536 Hill
 MON537 Stockwell Street
 MON538 Street
 MON539s Pump or Town Well, High Street
 MON540 Press site
 MON541 Wire Street
 MON542 Street Car Park
 MON543 Street Car Park
 MON544 Street Car Park
 MON545 Street

Gazetteer of the significant late medieval buildings of Colchester

by Dave Stenning

The more significant, or better preserved and understood, timber-framed buildings in the town are briefly described and their salient features highlighted. These descriptions should help illustrate points made in the discussion above (see pages 269–71) and also answer the question: What are the links between standing buildings and the evidence from excavations? These unquestionably exist, yet the two types of evidence do not readily agree or complement each other. This is partly because the excavations relate to the floors and the fittings set in or on them, none of which survive today.

Rose and Crown Hotel, East Street (MON277)

As a building of the late 13th or early 14th century, the Rose and Crown is likely to be the oldest surviving timber-framed building in Colchester (Menuge 1997). An aisled structure of three unequal bays, that to the west was originally floored and, on the ground floor, opened to the relatively long central bay. The carpentry includes passing braces, notched-lap joints and scarf-joints of the splayed, tabled and under-squinted type, all commensurate with an early date. However, some timbers are curved and the passing-braces are of the later type that terminates at the tie-beams. Whether this building was a domestic open-hall is open to question, and the relative small size and poor quality of the timbers might suggest a lower-status use.

In the late medieval period, the ‘hall’ was floored and raised in height and a small cross-wing superimposed over the western bay. To the east is a single jettied and gabled extension, probably originally in separate ownership. Interpretation of this intriguing complex is seriously hindered by the speculative restoration of the 1930s.

No. 7 Trinity Street (MON196)

No.7 forms part of a bewildering complex of old buildings, presently occupied by a solicitor’s office. The part in question is set back from the street frontage and contains the arched entrance to Tymperleys yard. Currently, only the remarkable roof is visible, but the overall proportions suggest a small, but impressive, open hall. Of two equal bays, the roof has queen-posts of cross-quadrate crown-post type and double-ogee moulded triangular section purlins. Clearly not the work of a vernacular carpenter, this roof would look more at home in Norfolk or north Suffolk and evidently was the product of a high-status craftsman. Despite the limited evidence, it seems reasonable to suggest that no. 7 represents the elegant remains of a public building of the late 15th or early 16th centuries.

Nos. 7–9 Queen Street (MON187)

This is a relatively early, possibly late 14th-century, two-bay cross-wing that was partially exposed during repair works in 1988. The pair of service doors, in the conventional location, is of ‘durn’ type, half of the arched head and one jamb being shaped out of a single timber. The front bay was a shop, with a window with a central post dividing it into two half-arches and a narrow, so-called ‘coffin’, door with conventional arched head.

No. 8 Trinity Street (MON197)

Abutting the south-west corner of no. 6 (*see below*) is a high-quality cross-wing of probable 15th-century date. All that is now visible is a very complete roof and exposed framing on the north flank wall. The former has a central octagonal crown post with a moulded capital and base, and short high-mounted braces somewhat Suffolk-like in character. The central truss was open, with an arched-braced tie-beam, suggestive of a former solar. Both ends were gabled, with that to the east having tension braces, indicating that it was publicly visible. The flank wall is of uncertain credibility, but contains one wide and one narrow arched timber head, unfortunately partially obscured. A shop front seems possible, but both the location and the position on the buildings throw doubt on this interpretation. A short distance east of the cross-wing, a further tie-beam with a solid knee-like brace can just be detected. Either there was a further bay or, more likely, the wing was later extended forward, towards the present street frontage.

No. 39 East Hill (MON238)

This is a late medieval, two-bay, jettied, cross-wing with a crown-post roof. The hall was to the east where Rosemary Avenue now intervenes. Good evidence remains for an overshoot cross-passage and an original shop front, with at least one arch-headed (?door) opening.

No. 93 Hythe Hill (MON11)

A late medieval, jettied (now underbuilt) two-bay cross-wing with evidence for a shop front, it is probably of overshoot cross-passage type. It has a longitudinally-braced crown-post roof. The exposed first-floor front framing has Colchester tension braces and a large window. Evidence for a hall parallel to the street consists of the end crown post of its roof on the flank top plate, with a brace towards the cross-wing.

No. 98 Hythe Hill (MON13)

A mid- to late 14th-century jettied cross-wing, this was probably originally of three bays with an overshoot cross-passage. The front room was a shop, possibly the earliest surviving in the town, with a window of two half-arches divided by a central post. The front door had a two-piece two-centred arch of steep early form. The second bay had joists aligned across the width. The studs of the partition for the service room wall are tenoned into a separate header plate set beneath the joists. There are splayed scarf joists with under-squinted abutments in both flanking wall plates and the collar purlins. The surviving crown-post has broad, gently curving braces to the collar purlin. The splayed opening is of conventional form, moulded towards the hall. The adjacent half of no. 97 appears to have been a very narrow, single-bay hall, and the right-hand half a repeat of no. 98. This would suggest the interesting possibility of a semi-detached pair of speculative units akin to the Wealden semi-detached pairs found in Maldon (Andrews and Stenning 1996) and widespread south of the Thames.

Bay House, West Stockwell Street (MON160)

This house currently has the appearance of two adjoining cross-wings. That to the right (east) is jettied, of two bays, and of probable overshoot cross-passage type, with a hall to the east. The widely spaced studs and thick, almost straight, crown-post braces suggest a 14th-century date. The left-hand wing was built against and is substantially reliant on the older wing for parts of the party wall. Despite first impressions, this wing seems to be the parlour/solar of a Wealden house that later had a gable superimposed. This two-bayed structure now

seems to be the only example of this popular building type to survive in Colchester.

No. 3 West Stockwell Street (MON40)

This 15th-century merchant's house is one of the most conspicuous and photographed medieval buildings in the town. It provides an interesting example of standard local carpentry features, such as posts without jowls and stud-to-stud tension bracing allied to interesting variations on standard plan forms.

Viewed from the street, it appears as two side-by-side and jettied cross-wings, all of a single build. Such an arrangement is unusual. A superficially similar looking structure in Lavenham High Street is the only obvious parallel that comes to mind. As is so often the case, it has been thoroughly restored, but with more sensitivity than usual. Looking at the exterior, the twin gables and first floors appear to be reasonably reliable, with the traceried windows, based on a surviving example, in the left of the left-hand wing. The 45-degree pitches of the gables seem an early example of pitch reduction, which is more often a 16th-century feature. The ground floor retains its pair of entrance openings and its major posts, with attractive and unusual carved angel impostos at the corners. Unfortunately, the fenestration seems to be pure invention, making for difficulties in interpreting the function of the ground-floor front rooms.

What is not immediately apparent is that the contemporary hall also survives to the north, behind a disguise of plain render. This was short and tall, and of two extremely unequal bays. It has been thoroughly remodelled inside. What do survive are: a crown-post collar purlin, one bay-defining storey post and remnants of a moulded top plate. The last, a real high-quality feature, is exactly matched over the spered opening to the adjoining cross-wing. The pair of adjoining cross-wings share a relatively deep plan form and some complexity of internal sub-division. This led the carpenter to take liberties with the customary coincidence of structure and room shapes. Generally, a cross-wing can be described as being of a finite number of structural bays, with rooms defined by these divisions. Here, storey posts and tie-beams appear in less logical locations, reflecting the primacy of the internal planning.

The left-hand (northern) wing contains an overshot cross-passage adjoining the hall. This opened to the latter, with a spered opening of particularly unusual form, most reminiscent of Lowes hardware shop in the Market Place at Thaxted (Stenning 1986). Normally, and elsewhere in Colchester, the spered opening is spanned by a continuous side girt, supported on flanking spere posts. Here, one side is supported on a full two-storey-post and the girt is spectacularly cambered. This cross-wing flank survives more completely than other parts of the complex, displaying superimposed, paired, tension braces of subtly double-curved (ogee) form. Traces also survive of a muntin-rail screen, of Kentish type, and normally only encountered in north-west Essex.

The cross-passage is a particularly sophisticated example with no less than four four-centred 'door heads' (the rear one now missing) across its width, effectively suggesting front and rear porches. Originally, the first-floor joists projected out beyond the jetty line, forming a flat-roofed external canopy, as at the Ancient House, Thetford, and a number of examples in York.

This cross-wing is spatially of a two-bay format with two more or less equal rooms on each floor. These are accessed from a pair of arched door openings in the flank of the cross-passage, spaced unusually a short distance apart. The first gave onto the ground-floor front room which, in view of its location, was likely to have been a shop. The second provided access to the rear rooms and also, by a stair trap, to the upper rear room. This first-floor

room would appear to have served as an anteroom to a solar in the front.

Uniquely, this cross-wing has a second undershot passage on its other, southern flank, reducing severely the width of the ground floor rooms. Narrower than the main entrance passage, it seems to have served as an access to the rear and for entry to the right-hand wing. The evidence suggests that this was an entirely separate unit of accommodation, presumably occupied by a tenant. Spatially, if not structurally, this seems to have contained a two-bay front room on each floor, with an additional smaller space to the rear.

Sadly, the rear part of both cross-wings has been seriously disturbed, this being where early 20th-century function took priority over scrupulous restoration. However, the format of side passage and three bays is a reasonably familiar one, exemplified in Essex in the former Cock Inn in Thaxted. This type forms one of the standard, truly urban, accommodation units with limited domestic space over, and to the rear of, a ground-floor shop. On occasions the rear bay formed a small open hall, as at The Cock and in other examples in the West Midlands. Interestingly, the southern flank wall is partially open-framed, indicating the presence of a pre-existing earlier building on the plot to the south. Access in this wing to the upper floor was gained via a stair trap in the rear part of the main front room, providing evidence of the possibility of a full-height open hall in the rear part. It seems conceivable that there may well have been two similar adjoining buildings of this type within that complex of fragments that now comprises the Minories Art Gallery in Colchester High Street.

All of the accommodation so far described appears to be of a single build. In addition, a short time later, a two-bay structure was erected, abutting the low end of the hall in the corner formed by the overlapping cross-wing. It is now unclear whether this was of one or two storeys, as the issue is confused by an abrupt change in ground level. What remains visible is a simple crown-post roof and a central arch-braced open truss. The location would suggest a possible kitchen and there are very slight traces of possible soot-blackening of the roof timbers.

No. 3 West Stockwell Street is thus a building of exceptional interest and one that still provides a vivid insight into life in 15th-century Colchester.

Bonnars, 37 Long Wyre Street (MON193)

This corner building is a tall two-bay cross-wing, probably of the early 15th century. Jettied on both public elevations, it incorporates a number of interesting non-standard features. Part of the ground floor appears to be domestic, with close studwork and a diamond-mullioned window fronting Eld Lane. The rest of this frontage, and the Long Wyre Street elevation, was composed of shop windows and a narrow shop door. The windows were of the half-arch type, but only partially survive, concealed now behind plaster. Interestingly, some of the jetty brackets are fixed midway over the large shop openings, rather than to storey-height posts. The first floor contained two rooms, each with an arch-headed window, on the east flank. Such arched heads are extremely unusual and, perhaps, denoted commercial use of this floor. The most surprising feature is the presence of a contemporary attic floor, fixed over small spacer-pieces, tenoned into each stud. This floor must be an exceptionally early example, demonstrated by the experimental nature of the structural solution. In order to provide a clear open attic space, there was no central tie-beam and the collar purlin of the cross-post roof (now replaced after a fire) was supported between two clasping collars. It seems likely, from mortise evidence, that the southern gabled elevation had multiple decorative wall bracing.

Nos. 5–7 Stockwell (MON164)

A remarkable 15th-century three-bay building with one large chamber on the first floor, this is described as ‘the old wool hall’ in a 17th-century deed in the possession of the owner. The ground floor was built with an open arcade fronting two long narrow rooms, possibly workshops. The building has a simple crown-post roof, jowled posts and was open framed to the west. The roof was hipped to the east over a pair of grouped four-light windows and presented a windowless first floor to the street.

Nos. 13–15 North Hill (MON129)

This is an intriguing, truly urban complex, the original use of which is difficult to ascertain. There are two parallel ranges forming a double pile building, that on the frontage being of uncertain date and probably an encroachment. The adjoining building, no. 11, is also of double pile form, and a through passage, adjoining no. 13, reveals no. 13’s northern flank. Here it can be seen that the undatable front range has close studwork and stud-to-stud tension braces. The inner range of no.13 consists of a single bay, probably always of two storeys, with a crown-post roof with substantial braces. It is possible that no. 11’s rear range is of the same build, as the through passage has evidence for having been a cross-passage with rear door, formerly with an arched head.

To the rear again of no. 13 is a two-storeyed four-bay range, at right angles to the street, with a substantial long-wall jetty, facing south. This early 15th-century structure is clearly later than the frontage block, in that the framing of the latter has been cut back to accommodate it.

The rear range has, on the first floor, two two-bay chambers and a crown-post roof with substantial braces. That closest to the frontage is the larger and was relatively poorly lit, with only a three-light window in front and rear walls. The rear chamber seems to have been physically separate and was accessed from a stair leading to an outward opening door on the ground floor. The top plates have halved and bridled scarf joints with sallied abutments, a relatively rare type and the best dating feature evident. The ground floor has a two-bay chamber, coinciding with that above. This has a relatively impressive arched entrance door, immediately adjoining the frontage range. The exposed spine-beam has an axial brace, a relatively early feature. To the rear of this and apparently separate, is a small room encroached upon by the staircase to the upper rear room. This has its own arched external door and a two-light traceried window of remarkable interest. To the rear again is a further small room, with an arched door and two small flat lintelled adjoining windows with low sills. The eastern end of the building has been slightly truncated, but evidence for its original length can be deduced. The building has a number of external tension braces, but those in the internal partitions have both serpentine and inverted curvature profiles. It seems likely that the whole of the complex was intended for commercial use, with a series of separate compartments in the rear range.

The rear ground floor room could have been a shop or, more likely, a workshop, given the unusual window type. At a later date, a chimney stack was inserted through the overlapping zone, between the front and rear range. A fireplace to the upper rear chamber has wall painting of c 1600 of the simulated panelling type, with the colours still remarkably bright.

No. 6 Trinity Street (MON195)

The wide entrance passage of this distinguished 18th-century brick house has good quality

close studwork forming its flanking wall. Roughly central, there is a substantial storey post, suggesting that this structure is the last surviving part of a late medieval cross-wing. At the rear, there is a full two-storey post and the partially visible end of a tie-beam with mortises for studs.

Beyond this point there is a rather more complete building, which is either an extension to, or was contiguous with, the aforementioned cross-wing. With somewhat lower ceiling heights, this consists of a two-storeyed structure, of uncertain function, with a long wall jetty along its northern flank. On each floor, it has a short bay fully open to a squarish room. Beyond this again is a chamber, of at least two bays, but here the structure is now too obscured to allow for full interpretation. The square room at ground-floor level had a pair of adjoining windows on its north side, beneath the overhanging jetty. To the south, there is another window, of two wide lights, and another above but slightly to its side. The rear two-bay room has a stair trap in its north-east corner. All of this part of the building, which seems to be mid-16th-century in date, is most likely to be domestic and could represent a response to a narrow urban plot.

Red Lion Hotel, High Street (MON34)

The Red Lion Hotel is probably the most significant surviving timber-framed building in Colchester. It seems likely that it was first built as a town house by the noble Howard Family, but by 1515 it had become an inn. This elaborate building is of at least three phases and has been exhaustively reported upon elsewhere (Stenning 1994). In that article it was suggested that the earliest structure was a jettied two-bay block, well back from the frontage and aligned against the western site boundary. Unfortunately, it is also possible to make a case for it post-dating the other phases. However, this block, which comprises two superimposed chambers, was clearly only part of a larger new or pre-existing building. Within a few years, it unquestionably came to form part of an H-plan complex, the central bar of which was also composed of two superimposed two-bay chambers. These similar two-bay blocks could be interpreted as either two superimposed halls, or as a great chamber over a hall, or as a first-floor hall over an above-ground undercroft.

The precise functions are unclear, but each has an upper and a lower end, and the ground-floor 'hall' of the central bar of the 'H' had a wide carriage-arch-like cross-passage in its eastern bay. The other accommodation is all of three storeys and jettied, both to the High Street and elsewhere. It would appear that, before this work was complete, the scheme was drastically modified to form a continuous three-storeyed frontage to the street. The completed development was composed of a series of self-contained, but linked, suites of rooms, arranged vertically, possibly over a ground floor of shops. The external elevations are elaborately carved and moulded; this is a rare extravagance in a building that seems to be the work of a local carpenter.

No. 118 High Street (MON113), almost opposite the Red Lion Hotel, is another three-storeyed building with a hybrid roof with both side-purlins and crown post. The George Hotel (below) was also probably a three-storey building. It seems that these are all that survive of a number of prestigious tall buildings that once lined the High Street.

The George Hotel, High Street (MON112)

This extensive complex of buildings with various remnants of framing incorporates a building jettied on two faces on the corner with George Street. In the flank there remains two good half-arch shop fronts exposed to the interior. To the north of these there is a blocked carriage arch. Within the main range is one wall, probably the flank of a cross-

wing, with widely spaced studs and substantial tension-braces. Adjoining this is a re-sited octagonal crown post with moulded and castellated capital. Wall paintings were found in the front range and one moved panel survives. The roof is said to include the moulded top plates of a three-storey structure.

Ye Olde Marquise Public House (formerly Marquis of Granby), 24 North Hill (MON132)

A relatively standard long-wall, jettied house of the 1520s, this is remarkable for its elaborate decoration. It has a long hall bay with central spine beam, and typical service rooms with paired doors with leaf-carved spandrels. The parlour had a door to the rear corner of the high-end partition, which has evidence for a protruding bench enclosing spere. The cross-passage was part differentiated by a front spere; the joists protruded over the pavement as a porch hood (as at 8 West Stockwell Street). The building was open-framed to no. 23 at the south service end. The front elevation was almost totally rebuilt early in the 20th century in a relatively unconvincing manner. However, part of the wall containing the entrance door with its four-centred arch and decorated spandrels was reused. The rear door, with carved spandrels to the outside, also survives. The joists of hall and parlour carry busy mouldings, typical of the period. The service room joists are chamfered. Similar multiple mouldings decorate the rear girt, and in the rear corner of the service partition is an impressive corbel carved with a bearded head.

The first floor displays the usual three rooms, with the room over the services being larger, as is sometimes the case in the 16th century; this may well have been the solar. The rear walls contain two extremely substantial posts which may have been incorporated from an earlier building.

To the rear, behind and overlapping the parlour, is a slightly later building of two storeys, jettied on both long frontages. This is open-framed towards the Marquise and also at its other end, against fragments of an earlier cross-wing. The ground floor has a remarkable room, of two unequal bays, divided by an exuberantly carved bridging joist. The latter is set on post corbels, with figure carving of proto-renaissance character. Towards the centre is a merchant's mark and initials. Towards the east end of this richly moulded room is a cambered mantle-beam with medallion busts, probably introduced from elsewhere. The upper floor appears to have been one large three-bay chamber with tie-beams, some moulded, and top plates also with mouldings. It remains possible that this curious and delightful building was not originally part of the Marquise.

No 23 North Hill (MON309)

This is a long-wall jetty building of narrow plan form, with the joists spanning the full width of the building. It adjoins no. 24, the end elevation with radiating arch braces being exposed to the interior of the public house. The plan form is now difficult to ascertain, but includes one partition and a former stair well.

No 37 (former Castle Book Shop), North Hill (MON134)

Almost opposite Ye Olde Marquise, this is another late-medieval long-wall jetty house that has been severely truncated. Much less elaborate, it retains an interesting area of 17th-century targeting motifs, now enclosed but visible with the aid of a mirror.

Gazetteer of late medieval monuments, elements and finds from the study area

<i>UAD no.</i>	<i>type</i>	<i>date</i>	<i>E</i>	<i>N</i>	<i>site codes</i>	<i>notes</i>	<i>CATB / other</i>
MON1028	bastion	LM				Town Wall, Priory Street	1
MON1029	bastion	LM				Town Wall, Priory Street	2
MON1030	bastion	LM				Town Wall, Priory Street	3
MON1031	bastion	LM				Town Wall, Priory Street	4
MON1032	bastion	LM				Town Wall, Priory Street	5
MON1033	bastion	LM				Town Wall, Vineyard Street	6
MON1034	bastion	LM				Town Wall, Vineyard Street	7
MON1037	bastion	LM				Town Wall, Vineyard Street	8
MON459	building	LM	599884	224880		Osborne Street	
MON21	building	LM	601330	224680	12/94a	Hythe Hill	
MON1013	building	LM				High Street	
MON627	building	LM	599784	225125		Long Wire Street	
MON642	building	LM	599559	225232		Cups Hotel Site	
MON153	building	LM	599584	225429		Stockwell Arms	
MON840	cellar	LM	599411	225007		Cellar of possible Medieval	

MON612	cellar	LM	599474	225019	1.81	Head Gate?
MON695	cemetery	LM			IRB 72	Culver Street
MON18	church	LM	601276	224714		St John's Abbey precinct
ELM318	drain	LM	598457	223999		St Leonard-at-the-Hythe
MON343	gatehouse	LM	599768	224753		Culver Street
MON373	hospital	LM	599105	224986		St John's Abbey Gatehouse +K194
MON352	hospital	LM	601148	225412		St Catherine's Hospital
MON277	house	LM	600914	225359		St Anne's Hospital
MON31	house	LM	599640	225191		The Rose and Crown Hotel
MON302	house	LM				No. 35-37 High Street
MON857	house	LM	599420	225075		No. 197 Lexden Road
MON172	house	LM	599754	225437		No. 40 Head Street
MON241	house	LM	600558	225247		No. 61 Maidenburgh Street
MON251	house	LM	600821	225308		Nos. 1 & 2 East Bay
MON258	house	LM	600903	225323		Nos. 24 & 25 East Street
MON34	house	LM	599675	225193		Nos. 39 & 40 East Street
MON14	house	LM	601470	224668		Red Lion Hotel
						Nos. 4 & 5

MON242	house	LM	600503	225281	Hythe Quay Nos. 60 & 61 East Hill Nos. 63–4 East Hill The George Hotel House 133, 133 A, 133B Hythe Hill Nos. 64–5 East Street Nos. 7 & 9 Queen Street Lexden Lodge Farmhouse House, 127 Hythe Hill/ Dolphin Inn 11, 12 & 13 Trinity Street 111 High Street 126 Hythe Hill/ Dolphin Inn 13–15 North Hill 149 High Street 151 High Street 21 Head Street 23 & 24 West Stockwell Street 26 to 29 North Hill 33 & 35 Long Wyre Street 3–6 West Stockwell
MON243	house	LM	600488	225284	
MON112	house	LM	599735	225243	
MON1	house	LM	601227	224706	
MON66	house	LM	600789	225329	
MON187	house	LM	599959	225199	
MON863	house	LM	597670	226215	
MON5	house	LM	601327	224708	
MON199	house	LM	599603	225054	
MON110	house	LM	599767	225234	
MON6	house	LM	601330	224704	
MON129	house	LM	599416	225378	
MON117	house	LM	599513	225214	
MON118	house	LM	599499	225213	
MON119	house	LM	599383	225118	
MON155	house	LM	599559	225447	
MON133	house	LM	599403	225488	
MON192	house	LM	599820	225039	
MON40	house	LM	599605	225283	

MON193	house	LM	599820	225033	Street 37 Long Wyre Street
MON160	house	LM	599571	225404	53 & 54 West Stockwell Street
MON164	house	LM	599606	225434	5–7 Stockwell Street
MON68	house	LM			No. 1 Greenstead Road
MON69	house	LM	601307	225155	No. 137 Greenstead Road
MON255	house	LM	600878	225318	No. 36 East Street
MON134	house	LM	599377	225449	No. 37 North Hill
MON197	house	LM	599576	225088	No. 8 Trinity Street (Tymperlies)
MON249	house	LM	600763	225302	Nos. 11–13 East Street
MON231	house	LM	600332	225242	Nos. 16 & 17 East Hill
MON159	house	LM	599515	225506	Nos. 36 & 37 West Stockwell Street
MON136	house	LM	599388	225324	Nos. 55 & 56 North Hill (Cock & Pye Inn)
MON67	house	LM	600743	225321	The Siege House, East Street
MON17	inn	LM	601487	224577	The Neptune Inn, Hythe Quay
MON183	inn	LM	599817	225160	Cross Keys Inn
MON132	inn	LM	599411	225466	Marquis of Granby
MON1045	kiln	LM			Medieval Kiln, 1–5

GRP21	latrine	LM?	599843	225194	SPT83	Trinity Street
MON78	ouse	LM	599395	225597		High Street
						Nos. 17–19
GRP21	pit	LM?	599843	225194	SPT83	Middleborough
GRP16	pits	LM	599220	224904	CSC 71	High Street
						Maldon
						Road
GRP11	pits	LM	599495	225054		roundabout
						Culver
GRP4	pits	LM	599297	225282	GBS 84–5	Street
						Gilberd
GRP9	pits	LM	599882	224874		School
						Osborne
						Street Car
MON29	river bank	LM	601997	224008		Park
						Waterfront
						deposits,
						riverbank at
MON1022	road	LM				the Hythe
						Maldon
MON1023	street	LM				Road
MON1024	street	LM				Middleborough
						Queen
						Street
MON1021	street	LM				High Street
ELM1243	wall	LM				Hythe Hill
ELM1244	wall	LM				Hythe Hill
ELM1245	wall	LM				Hythe Hill
ELM317	wall	LM	599474	225015		Culver
						Street
ELM950	wall	LM	599818	225292		Maidenburgh
						Street
ELM681	wall	LM	599389	225202		North Hill
GRP44	cess pit	LM	599447	224995	5/82a	Cameo
						Theatre
GRP14	pit	LM	600007	224796	MSC 74	Magdalen
						Street
FND299	pottery	LM			99/04d	Hythe Hill
GRP12	cess pits	LM?	599806	225120	COC 79	Long Wire
						Street
GRP101	pit	LM?	600780	225248	3/93c	Element
						Group,
						Royal Mail
						Depot
ELM1273	well	LM				Stanwell,
						public well
	well	LM				Stockwell,

	well	LM			public well Chiswell,
	well	LM			public well Childswell,
ELM1159	well	LM			public well King Coel's Pump,
MON1049	watermill	LM			public well Hull Mill
MON1050	watermill	LM			Cannock Mill
MON912	watermill	LM	597237	225628	Lexden Mill
MON914	watermill	LM			North Mill
MON915	watermill	LM			Middle Mill
MON913	watermill	LM			Stokes Mill
MON916	watermill	LM			East Mill
MON27	watermill	LM			Hythe Mill

Gazetteer of post-medieval monuments, elements and finds from the study area

<i>UAD no.</i>	<i>type</i>	<i>date</i>	<i>E</i>	<i>N</i>	<i>site codes</i>	<i>notes</i>	<i>CATB / other</i>
ELM1015	ditch	P-M	600321	224776	9/97a	Magdalen Street	
ELM1017	wall	P-M	600223	225233		Wall footing, west of no. 3 East Hill Wall, Old Poultry Site	
ELM1092	wall	P-M	599336	225698			
ELM1173	oven	P-M				Vineyard Press Site	
ELM1196	drain	P-M	599536	225148		High Street	
ELM1197	drain	P-M				Osborne Street	
ELM1198	drain	P-M				Osborne Street	
ELM1240	wall	P-M				Brick chute/wall circa late 17th century, 22 High Street	
ELM134	ditch	P-M	598472	225378		Parliamentarian siege works	
ELM135	latrine trench	P-M	598487	225339	1930-9	Civil War Latrine Trench, Sheepen Red Lion Hotel	
ELM22	well	P-M	599690	225184		Red Lion Hotel	
ELM23	hearth	P-M	599689	225183		Red Lion Hotel	
ELM34	drain	P-M	599679	225286		Vineyard Press site	
ELM679	well	P-M	600268	224787		Magdalen Street	
ELM736	wall	P-M	599447	224996	5/82a	Wall, Watching Brief at Cameo Cinema	

ELM894	wall	P-M	599537	225168		Wall, 19 High Street
ELM895	plith	P-M	599536	225147		High Street
ELM930	well	P-M	601374	224711		Hythe Hill
FND149	pottery	P-M	599638	225026		Eld Lane
FND274	cannon balls	P-M				Mercer Way
FND276	Civil War pottery, pipes and musket balls at High Woods	P-M				High Woods
FND306	pottery	P-M				16th and 17th century pottery from Fitzwalter Road nr The Lindens Lexden Road
FND324	Civil War finds nr The Lindens	P-M				Brook Street
GRP103	pits	P-M	600597	224893	7/93a	St Peter's House Evaluation
GRP110	revetment	P-M	599486	225610	10/98f	Trinity Street
GRP48	cess pits	P-M	599601	225027	9/83b	North Hill nos. 89 & 90 Hythe Hill
GRP69	midden	P-M	599375	225274	1945	69-70 High Street
MON10	house	P-M	601415	224676		71 & 72 High Street
MON100	house	P-M	599977	225226		73A & 73B High Street
MON101	house	P-M	599988	225234		no. 74
MON102	house	P-M	599999	225236		
MON103	house	P-M	600015	225238		

MON1035inn	P-M				High Street (The Minorities) Swan Inn, High Street Town cage
MON1036cage	P-M				
MON1038water house	P-M				
MON104 house	P-M	599999	225261		The Gate House & East Lodge Frere House (nos. 85 & 86 High Street) no. 105 High Street 106 High Street 108 High Street Swan Hotel nos. 91–93 Hythe Hill no. 113 High Street 117–118 High Street 119 & 120 High Street 145 High Street 146 High Street
MON105 house	P-M	599983	225257		
MON106 house	P-M	599813	225227		
MON107 house	P-M	599808	225226		
MON108 house	P-M	599782	225241		
MON109 house	P-M	599772	225235		
MON111 house	P-M	601431	224673		
MON111 house	P-M	599755	225233		
MON113 house	P-M	599719	225238		
MON114 house	P-M	599707	225238		
MON115 house	P-M	599538	225214		
MON116 house	P-M	599530	225213		
MON12 house	P-M	601454	224675		no. 97 Hythe Hill
MON120 house	P-M	599366	225054		no. 3 Headgate Court (Formerly The Kings Head

MON121	house	P-M	599383	225036	Inn) next to the Kings Head Church Street 54 Head Street
MON122	house	P-M	599388	225004	
MON123	house	P-M	599429	225036	60 Head Street
MON124	house	P-M	599437	225022	no. 2 North Hill
MON125	house	P-M	599412	225281	
MON126	house	P-M	599410	225364	no. 12 North Hill
MON127	house	P-M	599434	225330	8 North Hill
MON128	house	P-M	599406	225418	17, 18, 18a & 18b North Hill
MON13	house	P-M	601466	224673	nos. 98 & 99 Hythe Hill
MON130	house	P-M	599413	225430	nos. 19 & 20 North Hill
MON131	house	P-M	599404	225459	24 North Hill
MON135	house	P-M	599377	225398	45 & 46 North Hill
MON137	house	P-M	599384	225308	57 North Hill
MON138	house	P-M	599386	225269	60 North Hill
MON139	house	P-M	599376	225249	63 North Hill
MON140	house	P-M	599389	225237	65 & 65 North Hill
MON141	building	P-M	599392	225223	Waggon and Horses Inn
MON142	house	P-M	599392	225210	67 North Hill
MON143	building	P-M	599349	225494	Cistern Yard tenements
MON144	house	P-M	599441	225504	4 & 6 Northgate Street
MON145	house	P-M	599461	225506	10 Northgate Street
MON146	house	P-M	599530	225521	34 Northgate Street
MON147	house	P-M	599495	225500	nos. 13 & 15 Northgate Street
MON148	house	P-M	599596	225359	no. 10 West Stockwell Street
MON149	house	P-M	599594	225374	13 West Stockwell Street
MON15	house	P-M	601467	224651	no. 7 Hythe Quay

MON150	house	P-M	599590	225385	no. 14 West Stockwell Street
MON151	house	P-M	599588	225405	14A–16 West Stockwell Street
MON152	house	P-M	599588	225411	17 West Stockwell Street
MON154	house	P-M	599577	225441	20–22 (now 19–21) West Stockwell Street
MON156	house	P-M	599545	225456	25 & 27 West Stockwell Street
MON157	house	P-M	599541	225476	29–32 West Stockwell Street
MON158	house	P-M	599532	225508	35 West Stockwell Street
MON16	warehouse	P-M	601480	224590	55 West Stockwell Street
MON161	house	P-M	599572	225394	
MON162	house	P-M	599571	225385	56 West Stockwell Street
MON163	house	P-M	599567	225342	62 West Stockwell Street
MON165	house	P-M	599624	225439	Stockwell
MON167	house	P-M	599642	225381	37 & 38 East Stockwell Street
MON168	house	P-M	599644	225324	Stockwell House
MON169	house	P-M	599658	225413	no. 15 (formerly 14) East Stockwell Street
MON170	house	P-M	599664	225324	The Gables, East Stockwell Street
MON171	house	P-M	599758	225260	no. 1 George Street
MON173	house	P-M	599751	225478	nos. 51 & 52

MON174	house	P-M	599777	225377	Maidenburgh Street no. 10
MON175	house	P-M	599778	225396	Maidenburgh Street nos. 14 & 15
MON176	house	P-M	599775	225412	Maidenburgh Street nos. 18–20
MON177	house	P-M	599772	225443	Maidenburgh Street 23
MON178	house	P-M	599765	225481	Maidenburgh Street 27 & 29
MON179	house	P-M	599764	225506	Maidenburgh Street no. 33
MON180	house	P-M	599822	225174	Maidenburgh Street
MON181	house	P-M	599680	225142	Culver Street
MON182	almshouse	P-M	599742	225139	Lion Walk
MON184	school	P-M	599866	225164	Finches Almshouse
MON185	house	P-M			Grammar School, Culver Street
MON186	house	P-M	599626	225190	All Saints Court
MON188	house	P-M	599930	225139	Pelhams Lane
MON189	house	P-M	599899	225088	6–12 Queen Street
MON190	house	P-M	599806	225104	nos. 20–24 Queen Street
MON191	house	P-M	599812	225092	Long Wyre Street
MON194	house	P-M	599594	225124	17–23 Long Wyre Street
MON195	house	P-M			2 & 3 Trinity Street
MON196	house	P-M	599598	225082	no. 6 Trinity Street
MON198	house	P-M	599595	225074	no. 7 Trinity Street
					nos. 9 & 10 Trinity Street

MON2	house	P-M	601198	224689	50–52 Hythe Hill
MON20	inn	P-M	601458	224705	The Perseverance Inn
MON200	house	P-M	599600	225038	no. 14 Trinity Street
MON201	house	P-M	599619	225067	25 & 26 Trinity Street
MON202	house	P-M	599622	225049	no. 22 Trinity Street
MON203	inn	P-M	599629	225023	The Clarence Inn
MON204	gate	P-M	599609	225010	Scheregate (Previously 6a–6b Sir Isaac's Walk)
MON205	house	P-M	599614	225005	no. 3 Scheregate
MON206	house	P-M	599627	225001	nos. 1 & 2 Scheregate Steps
MON207	house	P-M	599617	224995	nos. 3a & 4 Scheregate (now 4a and 38 St John's Street)
MON208	house	P-M	599576	224964	St John's Street
MON209	house	P-M	599682	224959	Stanwell Street
MON210	house	P-M	599651	224997	Claudius House 62 & 62a Stanwell Street
MON211	house	P-M	599686	224829	nos. 11–14 St John's Green
MON212	house	P-M	599615	224757	St John's Green
MON213	house	P-M	599915	225002	no. 45 St Botolph's Street
MON214	house	P-M	599910	224982	nos. 40 & 41 St Botolph's

MON215	almshouse	P-M	600115	224712	Street Winnock's Almshouses
MON216	house	P-M	600127	224807	no. 187 Magdalen Street
MON217	house	P-M	600161	224805	no. 181 Magdalen Street
MON218	house	P-M	600263	224783	no. 166 Magdalen Street
MON219	house	P-M	600271	224783	nos. 164– 165 Magdalen Street
MON22	house	P-M	601335	224682	16th/17th 79 century house, Hythe Hill The Bakers Arms Inn, Magdalen Street
MON220	inn	P-M	600490	224768	
MON221	house	P-M	600560	224771	no. 111 Magdalen Street
MON222	house	P-M	600177	224780	no. 35 Magdalen Street
MON223	house	P-M	600232	224769	43–5 Magdalen Street
MON224	house	P-M	600264	224763	no. 53 Magdalen Street
MON225	house	P-M	600433	224744	nos. 81 & 82 Magdalen Street
MON226	house	P-M	600718	224756	no. 29 Barrack Street
MON227	house	P-M	600164	225077	nos. 76–82 Priory Street
MON228	house	P-M	600227	225220	nos. 55–57 Priory Street
MON229	house	P-M	600231	225100	Priory Street

MON23	house	P-M	601341	224684	Mid 17th–late 18th century house at the Hythe, Colchester	79
MON230	house	P-M	600280	225109	nos. 1–5 Childwell Alley	
MON232	house	P-M	600369	225255	no. 22 East Hill	
MON233	house	P-M	600379	225255	no. 23–24 East Hill	
MON234	house	P-M	600398	225257	25–27 East Hill	
MON235	house	P-M	600420	225258	nos. 29 & 32 East Hill	
MON236	house	P-M	600448	225260	no. 35 East Hill	
MON237	house	P-M	600455	225261	no. 36–37 East Hill	
MON238	house	P-M	600467	225262	nos. 38–39 East Hill	
MON239	house	P-M	600490	225263	no. 47 East Hill	
MON24	bridge	P-M	601510	224770	Hythe Bridge	
MON240	house	P-M	600509	225262	nos. 48–51 East Hill	
MON244	house	P-M	600464	225280	no. 67 East Hill	
MON245	house	P-M	600447	225279	nos. 68–69 East Hill	
MON246	house	P-M	600435	225279	The Goat and Boot Public House	
MON247	house	P-M	600294	225275	nos. 79–81 East Hill	
MON248	house	P-M	600254	225307	Land Lane	
MON25	warehouse?	P-M	601513	224631		
MON250	house	P-M	600784	225304	nos. 17 & 18 East Street	
MON252	house	P-M	600835	225304	no. 26 & 27 East Street	
MON253	house	P-M	600849	225310	nos. 29–33 East Street	
MON254	house	P-M	600872	225318	nos. 34–5	

MON256	house	P-M	600887	225321	East Street no. 37 East Street
MON258	house	P-M	600896	225323	no. 38 East Street
MON259	house	P-M	600912	225322	no. 41 East Street
MON26	house	P-M	601450	224700	103 Hythe Hill
MON260	house	P-M	600930	225317	House, East Street
MON266	building	P-M	599348	225256	Tudor Cottage
MON273	house	P-M	600517	225261	no. 52 East Hill
MON274	house	P-M	600520	225287	56–58 East Hill
MON275	house	P-M	600417	225278	no. 71 & 72 East Hill
MON276	house	P-M	600398	225278	no. 73 East Hill
MON279	house	P-M	600240	225242	54 Priory Street
MON280	house	P-M	600229	225252	no. 5 East Hill
MON290	house	P-M	599596	225191	28–30 High Street
MON3	house	P-M	601284	224685	68–70 Hythe Hill
MON30	house	P-M	599626	225198	no. 34 High Street
MON300	house	P-M	600024	225263	Winsley's House
MON301	house	P-M	597212	225195	no. 187 Lexden Road
MON303	house	P-M	599773	225353	no. 7 Maidenburgh Street (The Sun Inn)
MON304	inn	P-M	597090	225136	Lexden Rd
MON306	house	P-M	599387	225620	Fisher's Yard
MON307	house	P-M	599803	225248	nos. 1–3 Museum Street
MON308	house	P-M	599402	225440	no. 21 North Hill
MON309	house	P-M	599401	225452	no. 22 & 23

MON310	house	P-M	599407	225397	North Hill no. 16 North Hill
MON311	house	P-M	599413	225348	10 North Hill
MON312	house	P-M	599388	225285	no. 59 North Hill
MON313	innhouse	P-M	599334	225770	The Victoria Inn
MON314	house	P-M	599914	225053	nos. 39 & 41 Queen Street
MON315	house	P-M	599634	224994	no. 63 (now 33) Stanwell Street
MON316	house	P-M	599544	224994	nos. 35–39 St Johns Street
MON318	house	P-M	599514	224987	nos. 41–44 St Johns Street
MON318	house	P-M	599506	224982	nos. 45–47 St John's Street
MON319	house	P-M	599414	224966	Headgate Hotel, no. 1 St John's Street
MON32	house	P-M			38 High Street
MON320	inn	P-M	597035	223248	Ye Olde Leather Bottle Public House
MON322	house	P-M			nos. 2 & 3 Tinity Street
MON323	house	P-M	599574	225371	no. 56 West Stockwell Street
MON326	house	P-M	600254	225253	no. 8 East Hill
MON33	house	P-M	599657	225202	39 High Street
MON338	church	P-M	599266	225073	St Mary's- J465 at-the-walls
MON35	house	P-M			45–47 High Street, 16th

MON368	house	P-M	599768	224672	century house and 14th century cellar The Lucas House, St John's Abbey Precinct	K749
MON37	house	P-M	599672	225268	East Stockwell Street	
MON370	church	P-M	599380	225132	Dutch Refugee Church (demolished)	
MON38	house	P-M	599621	225235	17th century house and shops on High Street	
MON39	inn	P-M	599608	225256	Angel Inn	
MON4	house	P-M	601295	224684	nos. 71–72 Hythe Hill	
MON42	house	P-M	599647	225301	44 East Stockwell Street	
MON460	building	P-M	599753	224916	Building, Osborne Street	
MON493	almshouse	P-M			Almshouse, Eld Lane	
MON50	market cross	P-M	599602	225212	High Street	
MON52	building	P-M	599679	225274	Vineyard Press site	
MON59	fort	P-M	598489	225316	Fort, Sheepen	
MON628	building	P-M	599787	225128	Long Wyre Street	
MON629	building	P-M			Long Wire Street	151
MON63	house	P-M	600848	225327	no. 59 East Street	
MON64	house	P-M	600806	225327	nos. 60–61 East Street	
MON65	house	P-M	600798	225325	nos. 62–63 East Street	
MON7	house	P-M	601347	224708	122–123 Hythe Hill	
MON70	house	P-M			nos. 283–7	

MON71	house	P-M			Greenstead Road no. 309
MON72	house	P-M	599401	225506	Greenstead Road no. 1
MON73	house	P-M	599406	225553	Middleborough no. 10
MON74	house	P-M	599410	225563	Middleborough no. 11
MON75	house	P-M	599409	225576	Middleborough nos. 12 & 13
MON76	house	P-M	599407	225582	Middleborough north of 12 & 13
MON77	house	P-M	599407	225589	Middleborough no. 16
MON79	house	P-M	599351	225615	Middleborough nos. 20 & 21
MON8	house	P-M	601374	224703	Middleborough Hythe Hill
MON80	house	P-M	599387	225671	no. 1 North Station Road
MON81	house	P-M	599369	225692	no. 3 North Station Road (Old Numbering)
MON82	house	P-M	599375	225713	nos. 7 & 9 North Station Road
MON83	house	P-M	599367	225749	nos. 25 & 27 North Station Road
MON84	house	P-M	599354	225815	nos. 45 & 47 North Station Road
MON85	house	P-M	599319	225896	nos. 52–58 North Station Road
MON856	house	P-M	599884	225219	93 High Street
MON86	house	P-M	599334	225781	nos. 12–24 North

MON867	flanker	P-M	600157	225593	Station Road Royalist earthwork, NE corner of Town Wall
MON868	fort	P-M			Fort Whaley, Parliamentarian
MON869	fort	P-M			Fort Suffolk, Parliamentarian
MON87	house	P-M	599347	225686	no. 2 North Station Road (formerly Castle Inn)
MON870	fort	P-M			Fort Bloyes, Parliamentarian
MON871	fort	P-M			Fort Rainsborough, Parliamentarian
MON872	fort	P-M			Fothergall's Fort, Parliamentarian
MON873	bridge	P-M			Pontoon bridge over River Colne at Sheepen
MON874	circumvallation	P-M			Parliamentarian siege works
MON875	fort	P-M			Colonel J489 Ewer's Leaguer, Parliamentary
MON876	circumvallation	P-M			Fort, Sheepen Parliamentarian siege works
MON877	fort	P-M			Ingolesby Fort, Parliamentarian, east of Sheepen Hill
MON878	bastion	P-M			Parliamentarian siege works
MON879	circumvallation	P-M			Parliamentarian

MON88	house	P-M	599383	224989	siege works no. 5a Crouch Street
MON880	circumvallation	P-M			Parliamentarian
MON881	bastion	P-M			siege works Parliamentarian
MON882	circumvallation	P-M			siege works Parliamentarian
MON883	bastion	P-M			siege works Parliamentarian
MON884	circumvallation	P-M			siege works Parliamentarian
MON885	fort	P-M			siege works Fort Essex,
MON886	fort	P-M			Parliamentarian Barkstead Fort,
MON887	circumvallation	P-M			Parliamentarian
MON888	circumvallation	P-M			siege works Parliamentarian
MON889	bastion	P-M			siege works Parliamentarian
MON89	house	P-M	599372	224989	siege works Crouch Street
MON890	circumvallation	P-M			Parliamentarian
MON891	bastion	P-M			siege works Parliamentarian
MON892	fort	P-M			siege works Fort Needham,
MON893	circumvallation	P-M			Parliamentarian
MON894	bastion	P-M			Parliamentarian siege works
MON895	circumvallation	P-M			Parliamentarian
MON896	sconce	P-M			siege works Sconce, part of 1648 Parliamentarian
MON897	bastion	P-M			siege works Parliamentarian
MON898	circumvallation	P-M			siege works Parliamentarian siege works

MON899	hornwork	P-M			Hornwork, part of 1648 Parliamentarian siege works
MON9	inn	P-M	601364	224674	The Queen's Head Inn
MON90	house	P-M	599341	224988	no. 17 Crouch Street
MON900	circumvallation	P-M			Parliamentarian siege works
MON901	windmill	P-M	599937	224551	Mersea Road
MON902	windmill	P-M	600246	224583	Military Road
MON903	windmill	P-M	600125	224543	Windmill, south end of Golden Noble Hill
MON904	windmill	P-M	599253	224703	Butt Road
MON905	windmill	P-M	601147	225555	Harwich Road
MON906	windmill	P-M	601278	224073	north of Distillery Pond
MON907	windmill	P-M	601569	223736	The Distillery Mill, Windmill north of Hilltop Close
MON909	windmill	P-M	598754	224996	Windmill, 'The Oaks' Lexden Road
MON91	almshouse	P-M	600794	223975	Winsley's Almshouses
MON910	windmill	P-M	598171	224985	Windmill, 'The Second Mill', Lexden Road
MON911	cross	P-M	597080	223224	Pedder's Cross, Shrub End Road
MON92	watermill	P-M	600559	223836	Bourne Mill
MON93	inn	P-M	599449	225186	White Hart

MON932	house	P-M	597090	225163		Inn nos. 6 & 7 High Street
MON933	house	P-M	597077	225154		205 & 207 Lexden Road
MON934	house	P-M	597237	225199		209 & 211 Lexden Road
MON936	house	P-M				Jacqueline Court, Lexden Road
MON937	house	P-M	597241	226056		Sheepen Farmhouse
MON938	house	P-M	597299	223918		West House (Westfields)
MON94	house	P-M	599487	225178		Farmhouse
MON941	manor	P-M	601831	225049		Cooper's Farmhouse
MON95	house	P-M	599494	225185		(Later Prettygate Farm)
MON96	house	P-M	599501	225185		no. 11 High Street
MON967	bay hall	P-M	599435	225210		Greenstead Manor
MON97	house	P-M	599552	225185		12 High Street
MON979	house	P-M	599822	225283		no. 13 High Street
MON983	house	P-M	599311	225720		Dutch Bay Hall
MON99	house	P-M	599879	225199		23 & 24 High Street
GRP65	pit	P-M	599998	225366	1928	Ryegate Road
GRP11	pits	P-M	599495	225054		17th? century building, Old Poultry Site
GRP4	cultivation	P-M	599297	225282	GBS 84-5	65 High Street
						Castle Park
						Culver Street
						Gilberd

GRP6	plot	P-M	599347	225551	MID 78	School
GRP19	well	P-M	600177	225185	8/83e	Middleborough
	pit					Mulberry
GRP9	drain	P-M	599882	224874		Nursery
						Osborne
						Street Car
ELM834	burial	P-M? P-M	599860	224562		Park
						St John's
GRP53	pit				1958	Mount
GRP83	pits	P-M	599791	225081	12/97e	Stockwell
						Long Wire
GRP14	pit	P-M	600007	224796	MSC 74	Street Co-
						op
						Magdalen
						Street
<i>UAD no.</i>	<i>type</i>	<i>date</i>	<i>E</i>	<i>N</i>	<i>site codes</i>	<i>notes</i>
						<i>CATB /</i>
						<i>other</i>
ELM1015	ditch	P-M	600321	224776	9/97a	Magdalen
ELM1017	wall	P-M	600223	225233		Street
						Wall
						footing,
						west of no.
ELM1092	wall	P-M	599336	225698		3 East Hill
						Wall, Old
						Poultry
						Site
ELM1173	oven	P-M				Vineyard
						Press Site
ELM1196	drain	P-M	599536	225148		High
						Street
ELM1197	drain	P-M				Osborne
						Street
ELM1198	drain	P-M				Osborne
						Street
ELM1240	wall	P-M				Brick
						chute/wall
						circa late
						17th
						century, 22
						High
						Street
ELM134	ditch	P-M	598472	225378		Parliamentarian
						siege works
ELM135	latrine	P-M	598487	225339	1930-9	Civil War
	trench					Latrine
						Trench,
						Sheepen
ELM22	well	P-M	599690	225184		Red Lion

ELM23	hearth	P-M	599689	225183		Hotel Red Lion
ELM34	drain	P-M	599679	225286		Hotel Vineyard
ELM679	well	P-M	600268	224787		Press site Magdalen
ELM736	wall	P-M	599447	224996	5/82a	Street Wall, Watching
						Brief at Cameo
ELM894	wall	P-M	599537	225168		Cinema Wall, 19
						High Street
ELM895	plith	P-M	599536	225147		High Street
ELM930	well	P-M	601374	224711		Hythe Hill
FND149	pottery	P-M	599638	225026		Eld Lane
FND274	cannon balls	P-M				Mercer Way
FND276	Civil War pottery, pipes and musket balls at High Woods	P-M				High Woods
FND306	pottery	P-M				16th and 17th century pottery from Fitzwalter Road
FND324	Civil War finds nr The Lindens	P-M				nr The Lindens Lexden Road
GRP103	pits	P-M	600597	224893	7/93a	Brook Street
GRP110	revetment	P-M	599486	225610	10/98f	St Peter's House
						Evaluation
GRP48	cess pits	P-M	599601	225027	9/83b	Trinity Street
GRP69	midden	P-M	599375	225274	1945	North Hill
MON10	house	P-M	601415	224676		nos. 89 &

MON100	house	P-M	599977	225226	90 Hythe Hill
MON101	house	P-M	599988	225234	69–70 High Street
MON102	house	P-M	599999	225236	71 & 72 High Street
MON103	house	P-M	600015	225238	73A & 73B High Street
MON1035	inn	P-M			no. 74 High Street (The Minorities)
MON1036	cage	P-M			Swan Inn, High Street
MON1038	water house	P-M			Town cage
MON104	house	P-M	599999	225261	The Gate House & East Lodge
MON105	house	P-M	599983	225257	Frere House (nos. 85 & 86 High Street)
MON106	house	P-M	599813	225227	no. 105 High Street
MON107	house	P-M	599808	225226	106 High Street
MON108	house	P-M	599782	225241	108 High Street
MON109	house	P-M	599772	225235	Swan Hotel
MON111	house	P-M	601431	224673	nos. 91–93 Hythe Hill
MON111	house	P-M	599755	225233	no. 113 High Street
MON113	house	P-M	599719	225238	117–118 High Street
MON114	house	P-M	599707	225238	119 & 120

MON115 house	P-M	599538	225214	High Street 145 High Street
MON116 house	P-M	599530	225213	146 High Street

Gazetteer of excavations in Colchester 1845–2008

1845	Excavations north of the Castle	EVT3088	J T Round, Roman building
1852	Duncan's excavations, 1852/3	EVT3046	P M Duncan, EAS, Duncan's Gate
1865	Excavation of a Roman house on North Hill	EVT3049	J Parish, EAS, Roman town house
1876	Excavations at the Colchester Union	EVT3051	H Laver, Roman building
1877	Excavation of five kilns at Warren Field	EVT3050	G Joslin, Roman pottery kilns
1906	Excavation of pavement at 18 North Hill	EVT3052	H Lazell, Roman building
1907	Excavation of Roman houses, Castle Park	EVT3053	H Laver, Roman building
1910	Excavation of Lexden Mount	EVT3054	H Laver & F Reader, Morant Club
1913	Excavations at the Balcerne Gate	EVT3047	H Laver & E N Mason, Morant Club
1914	Excavation behind brewery on North Hill	EVT3153	E N Mason, Roman building
1917	Excavations at the Balcerne Gate	EVT3048	R E M Wheeler
1920	Castle Park Excavations	EVT3045	R E M Wheeler, Morant Club, Roman town houses
1920	Excavations at 9 North Hill	EVT3145	A W Frost, Roman street & building
1921	Museum Street Excavation	EVT3091	Morant Club, negative
undated	Excavations in the Castle well house	EVT3599	Unknown, pre-1922, Temple podium
1922	Excavation of temple podium and castle	EVT3092	P G Laver, Temple podium
1922	Excavations at 18 North Hill	EVT3096	H Lazell, Roman building
1922	Excavations at 9 North Hill	EVT3146	A W Frost, Roman building
1923	Excavations within Bastion 1	EVT3094	P G Laver
1924	Excavation of Lexden Tumulus	EVT3095	H Laver & P G Laver
1925	Excavations at 18 North Hill	EVT3097	P G Laver, Roman house
1925	Excavation of the	EVT3098	P G Laver?

1925	temple podium Excavation of the	EVT3099	G Farmer & E J Rudsdale
1927	town rampart Excavation of Hollytrees Meadow, 1927/8	EVT3100	P G Laver, EAS, 'Mithraeum', drain, Duncan's Gate, Roman buildings
1928	Excavation of the 'Mithraeum', 1928/9	EVT3101	M R Hull, EAS, 'Mithraeum'
1928	Excavations in Hollytrees Meadow, 1928/9	EVT3102	M R Hull, Roman buildings
1929	Excavation of a Roman Pottery Shop	EVT3056	M R Hull, CRGS Staff
1929	Excavation of Precinct Wall in Castle Park	EVT3147	H Laver?, of Temple Precinct outer wall
1930	Excavations at Royal Grammar School	EVT3705	CRGS Headmaster excavated his lawn, Roman ditches and pottery
1930	Excavations at Sheepen, 1930-39	EVT3001	CEC, LPRIA and Roman settlement
1930	Excavations in King's Meadow	EVT3104	CEC, negative results
1931	Excavations south of Castle Keep, 1931-34	EVT3521	P G Laver & E J Rudsdale, Roman buildings, Barbican, Bailey Chapel and Hall, Roman Precinct
undated	Excavation of Bastion 2, Town Wall	EVT3141	P G Laver
undated	Excavations between Bastions 1 & 2, Town Wall	EVT3142	P G Laver
1931	Excavation of Town Wall Bastion 5 and bus-park	EVT3106	M R Hull, bastion and Roman buildings
1931	Excavations in P G Laver's garden	EVT3151	P G Laver excavated his own garden, Roman building
1932	Excavations at Lexden Dyke Middle	EVT3713	H Poulter & T Cruso supervised by C F C Hawkes
1932	Excavations at Northfolk's House	EVT3105	M R Hull, Roman building
1933	Castle excavations, 1931-3	EVT3108	P G Laver, Castle keep
1934	Excavations at the	EVT3109	M R Hull, Roman

1934	Mumford Works Excavation of Bastion 4	EVT3112	building M R Hull
1934	Excavations at the Royal Grammar School	EVT3110	A F Hall with CRGS boys, Roman Road
1934	Excavation of new G.P.O site	EVT3152	M R Hull, Roman building
1935	Excavations at 22 Crouch Street	EVT3127	M R Hull, Roman church?
1936	Excavations in field 1302 by A F Hall	EVT3111	A F Hall, Roman ditches
1936	Excavations at 'Peartree Junction'	EVT3113	M R Hull, LPRIA dykes
1937	Excavations at 10 North Hill, 1937/8	EVT3143	C A Winkles, Roman building and street
1937	Excavation of the town ditch	EVT3114	M R Hull
1938	Section I, Tower 1, Town Walls	EVT3116	M R Hull, town wall and rampart
1939	Excavations at Altnacealgach House	EVT3115	M R Hull, LPRIA dykes, Roman ditches
1930s	Trial Pits at 17 Beverley Road	EVT3144	A F Hall, burials and crematorium?
1945	Excavations at 60 North Hill	EVT3117	G A Martin & I M Sparrow directed by M R Hull, Roman building
1946	Excavations at Gilbert House	EVT3712	A F Hall, Roman road and burials
1947	Excavation of Temple at CRGS	EVT3119	CRGS staff & boys, Roman temple
1948	Excavation of Section VI, Town Wall	EVT3118	R J Appleby
1950	Excavations at St. Martin's House	EVT3120	M R Hull, Roman buildings and street
1950	Castle Park Excavations	EVT3121	M Cotton, K M Richardson, R J Appleby, Roman temple precinct and streets
1951	Excavation on lawn of Gurney Benham House	EVT3710	A F Hall, hypogeum?
1951	Excavation of Section Ia, Town Walls	EVT3122	K M Richardson
1952	Enclosure on the north bank of the	EVT1496	R J M Appleby, undated enclosure

1952	Colne Excavation of Kiln 25 at Endsleigh School	EVT3150	J Williams (headmaster) & J B Baird, Roman kiln
1953	Excavations at Hospital Operating Theatre	EVT3524	R J Appleby, Roman pottery
1953	Excavations at 12 Lexden Road and CRGS	EVT3706	CRGS boys, Roman Road
1953	Excavation of Temple of Claudius wall	EVT3057	M R Hull, Temple precinct, bailey ditch, street, drain
1954	Excavation of 'Mithraeum'	EVT3511	Museum, 'Mithraeum' and drain
1955	Excavation of kilns 26, 27, 28, Endsleigh School	EVT3451	Miss Bushell & J B Baird, Roman kiln
1955	Excavations at St. Nicholas's Church	EVT3058	M R Hull, church, Roman buildings and street
1955	Excavations in Lewis's Gardens	EVT3069	K M Richardson, Roman buildings
undated	Excavation of the CRGS Playing Field	EVT3135	A F Hall, Roman ditch
undated	Excavation south east of Gurney Benham House	EVT3136	A F Hall, Roman Road
undated	Excavations in Field 1266 and 1266a	EVT3137	A F Hall, Roman ditch
1955	Excavations at the 'Old Castle'	EVT3079	A F Hall, undated enclosure, Roman ditches
1955	Excavation of a well at Everett's Brickyard	EVT3123	Lt Cdr Farrands, Mr Young, S West, Roman well
1955	Excavations at St. Helen's Lane building site	EVT3124	L H Gant & W E Tucker, Roman building
1956	Excavations at Prettygate Junction, 1956-58	EVT3158	C F C Hawkes, LPRIA and Roman? Dykes
1956	Excavations near Altnacealgach	EVT3159	J Wachter, Roman Wall
1957	Excavation on allotment at Park Road	EVT3076	CAG, negative results
1957	Possible kiln at New	EVT3077	CAG, Roman pottery

1957	Technical College Site Excavation of Roman drain in Vineyard Street	EVT3078	CAG, Roman drain
1957	Excavations north of Bypass 1957–62	outside	B P Blake Triple Dyke?
1958	Excavations in Lewis's Gardens	EVT3070	K M Richardson, Roman buildings
1958	Excavation in Mrs Reid's Field, Lexden Road	EVT3074	H C Calver, CAG, Roman kiln?
1958	Excavations at 8 Crowhurst Road	EVT3075	H J & B J N Edwards, Roman road and building
1958	Excavations in Stockwell Street	EVT3080	CAG, Roman street and medieval Pottery
1958	Excavation for widening of St. Helen's Lane	EVT3149	H C Calver, Roman Street
1959	Excavation of kilns 29, 30 & 31, Warren Field	EVT3030	H C Calver & others, Roman pottery kilns
1959	Excavation of a Romano-Celtic temple, Sheepen	EVT3081	B P Blake with CAG, Romano-Celtic temple
1960s	Excavation of oval hollow, CRGS	EVT3517	A F Hall, negative results
1960s	Excavation of town ditch at Land Lane	EVT3922	Unknown, town ditch
1960	Excavations at the Joslin/Tesco site	EVT3082	CAG, post-medieval house
1960	Excavations at 147 Lexden Road, 'Somerford'	EVT3125	M D Brasier, Roman pit
1960	Excavations at the Firs, Maldon Road	EVT3126	M R Hull, negative results
1962	Excavations along Balcerne Lane/ Crouch Street	EVT3071	B P Blake, churchyard, Roman buildings, town wall
1963	Excavations at St. Mary's Cottage	EVT3323	B P Blake, Roman building
1963	Excavations at the CRGS Canteen	EVT3711	Unknown? Roman Road
1963	Excavation of the Clinic Site, Colchester	EVT3128	CEC, Roman street
1963	Excavations at Telephone Exchange	EVT3139	J Blythe (Archaeological Research Group), Roman drain,

1963	Excavation, 'Lorgarth' garden, 1963/4	EVT3140	buildings, street B P Blake, Roman
1964	Excavations on East Stockwell Street	EVT94	buildings, Saxon finds CEC, Roman
1964	Excavations at 5 Maidenburgh Street	EVT3522	building, street and post-medieval drain B R K Dunnett, undated burials, temple precinct, castle bailey ditch and rampart
1964	Excavations on south side of Temple Precinct	EVT3068	CEC, Temple Precinct, drains, Street, Bailey ditch
1964	Excavation of the town ditch and Bastion 3	EVT3083	P R Holbert with CAG
1964	Excavations at the Royal Grammar School	EVT3084	P W Crittenden & CRGS boys Roman ditch and finds
1964	Excavations at Duncan's Gate 1964/5	?	B P Blake
1964	Excavations at Church Street	EVT3130	J Blyth, Roman street and building
1965	Excavations at 5 Balcerne Gardens	EVT3061	CEC, Roman buildings
1965	Trial trench at Tudor Cottage, St. Peter's Close	EVT3062	CEC, Roman floor
1965	Excavations at the Firs Car Park	EVT3064	CEC, Roman church?
1965	Excavations at the Victoria Inn Site	EVT3066	CEC, Roman buildings
1965	Excavations at Lorgarth, West Stockwell St 1963/4	EVT3129	B P Blake, Roman street and buildings
1965	Excavations in St. Mary's Rectory Gardens	EVT3131	P R Holbert with CAG, Roman Street and buildings
1965	Excavations on North Hill	EVT3138	CEC, Roman streets and building
1966	Excavation at 14 Lexden Road	EVT3704	P W Crittenden, Roman road
1966	Excavation of the Telephone Exchange Site	EVT3059	CEC, Roman buildings and streets
1966	Excavations behind 5 Queen Street	EVT3065	CEC, Roman buildings

1966	Excavations behind 12 Queen Street	EVT3072	Unknown?
1966	Excavations in the garden of 26, Lexden Road	EVT3085	CAG, Roman Road
1967	Excavations at 44 North Hill	EVT3060	CEC, Roman building and ditches
1967	Excavations at St. Mary's Rectory site	EVT3063	CEC, Roman buildings and streets
1967	Excavations, East Stockwell St Youth House	EVT3133	CEC, negative
1969	Excavation of the Methodist Church site	EVT3523	CEC, Bailey ditch and rampart, Tudor building, Roman street
1969	Excavation of tile kilns at Moat Farm, 1969/70	EVT3086	CAG, Roman tile kilns
1969	Excavation of the Warren Fields Glass Kiln	EVT3132	CEC (B R K Dunnett), Roman occupation
1970	Excavations at 30 St. Julian's Grove	EVT3518	Unknown? Roman terracing
1970	Excavations at Halifax House, Head Street	EVT3787	Unknown
1970	Excavations at Sheepen	EVT3029	B R K Dunnett, LPRIA and Roman settlement
1971	Lion Walk excavations, 1971-4	EVT3002	CAT, Roman, Saxon, medieval and post-medieval town site
1971	Excavations along Maldon Road	EVT3018	CAT, Roman cemetery
1971	Crouch Street excavations	EVT3021	CAT, post-medieval pits
1971	Kiln Road Excavation	EVT3025	CAT, LBA and early Roman occupation site
1971	Excavations at St. John's Abbey	EVT3031	CAT, late medieval cemeteries
1971	Curry's Site, 45/46 High Street	EVT61	M R H Davies, Roman pottery shop
1972	Excavations at St. Mary's Steps	EVT3007	CAT, Roman drain-arch/medieval postern
1972	Excavations at St. John's Abbey	EVT3019	CAT, Roman and medieval cemeteries, ? late Anglo-Saxon church
1972	Excavation of	EVT3073	CAT, Castle Well

	Colchester Castle Well		
1973	Excavations at Gilbert School, 1973/4	EVT3222	Gilbert School staff & boys, Roman building and street
1973	Balkerne Lane Excavations 1973–76	EVT3003	CAT, Roman houses and town defences
1973	Cups Hotel Excavation 1973/4	EVT3008	CAT, Roman, Saxon, medieval and post- medieval town site
1973	Oaks Drive Excavation	EVT3009	CAT, Roman pottery kilns
1973	Inner Relief Road Excavation	EVT3010	CAT, Roman building and ditches
1973	Excavation of Inner Relief Road (Crouch St)	EVT3023	CAT, Roman building and ditches
1973	Lexden Tumulus Excavation	EVT3026	CAT
1973	Excavation of Holy Trinity Church	EVT3154	M R H Davies
1974	11 Magdalen Street	EVT3011	CAT, medieval and post-medieval houses and street
1974	Excavation at King Coel's Kitchen	EVT3039	CAT, negative results
1975	Excavation in St. Giles's Church	EVT3020	CAT
1975	Excavation at Oaklands Avenue	EVT3024	CAT, LPRIA and Roman ditches (date confused?)
1975	Excavations in the Dutch Quarter	EVT3036	CAT, post-medieval features
1975	Excavation of the Balkerne Gate	EVT3037	CAT
1976	St. Helena's School Excavations	EVT3012	CAT, Roman temple and house
1976	Butt Road Excavations, 1976–79	EVT3027	CAT, Roman cemetery and mausoleum
1977	Excavation of Castle keep	EVT3519	P J Drury & W J Rodwell
1977	Excavation of Colchester Castle bailey chapel	EVT3520	CAT
1977	Excavations at 1 Trinity Street	EVT3013	CAT, Roman house and post-Roman ? kilns

1977	Excavations at St. John's Abbey	EVT3032	CAT, St. John's Church (Anglo-Saxon)
1977	Excavations at Gosbecks	outside	CAT, portico and theatre
1978	Trial trenches at former Butt Road site	EVT3248	CAT, negative results
1978	Trial trench at 1 & 1A Eld Lane, 1978/9	EVT3250	CAT, negative results
1978	Middleborough Excavations	EVT3004	CAT, Roman and medieval houses, kilns, street
1978	Excavation at Castle Gardens	EVT3038	CAT, Roman town defences
1979	7-15 Long Wyre Street	EVT3014	CAT, Roman and medieval houses
1979	GPO Sorting Office, Clarendon Way	EVT3040	CAT, negative results
1981	Excavation of Roman theatre, Maidenburgh Street	EVT3322	CAT
1981	Culver Street Excavations 1981/2 and 1984/5	EVT3005	CAT, Roman, Saxon, medieval and post-medieval town site
1983	Excavations along Castle Park Sewer	EVT3015	CAT, Roman houses and streets
1983	East Hill House Garden excavations	EVT3033	CAT, Roman Streets and houses, burials
1983	Excavation at 61/2 High Street (Spendrite)	EVT3041	CAT, ?Roman burials, drain and building
1983	Anglia Water Authority site, Balcerne Hill	EVT3042	CAT, negative results
1983	Excavations at Crouched Friars, 1983/4	EVT3087	CAG, Roman road
1984	Excavations at the Gilbert School 1984/5	EVT3006	CAT, Roman buildings
1984	Excavation, Lion Walk United Reformed Church	EVT3016	CAT, Roman buildings
1984	Excavations at St. Helen's Chapel	EVT3043	CAT, chapel and Roman theatre
1986	Excavations at Angel Yard, 1986 and 1989	EVT90	CAT, Roman, medieval and post-medieval buildings

1986	Excavation of St. Botolph's Priory	EVT3165	CAT, Priory church, medieval? burials
1986	Excavation on Museum Street+D195	EVT3166	CAT, Roman and medieval buildings
1987	Excavations at Britannia Works	EVT3167	CAT, negative results
1987	Excavation at Bluebottle Grove	EVT3168	English Heritage, LPRIA dyke
1987	Evaluation at 1 Middleborough	EVT3927	CAT, town wall
1987	Excavation of enclosure 1, Stanway	outside	CAT, LPRIA enclosure
1987	Excavations at 36 East Stockwell St	EVT3169	CAT, unpublished?
1988	Evaluation at 6/7 Church Walk	EVT3569	CAT, Town wall
1988	Excavations at 11 Short Wyre Street	EVT3789	CAT Report 113, Town wall
1988	Excavations at No 42 Crouch Street	EVT3017	CAT, Roman burials, medieval friary buildings
1988	Excavation of enclosure 1 & 2, Stanway	outside	CAT, LPRIA/early Roman enclosures
1988	Osborne Street Excavations	EVT3028	CAT, Roman, medieval and post-medieval buildings
1988	Excavation of the Castle Chapel	EVT3155	CAT
1988	Evaluation at 18 North Hill	EVT3571	CAT, Roman building
1988	Excavations at 53 Crowhurst Road	EVT3170	CAT, Roman finds
1989	Excavation of St. Mary Magdalen's churchyard	EVT3157	CAT, medieval leper hospital
1989	Excavations at 14/15 West Stockwell Street	EVT3171	CAT, Roman Street
1989	Evaluation, Warehouse west of 2 Northgate St	EVT3573	CAT, Town wall
1989	Gosbecks-Colchester Road	outside	CAT, Roman road
1989	Evaluation at 89 East Hill garden	EVT3574	CAT, Town wall
1989	Evaluation at Royal London, Sheepen Place	EVT3575	CAT, wooden structure?

1990	Vineyard Press	EVT91	CAT, Roman and medieval buildings
1990	Excavations, 1989/90		
1990	Evaluation next to 3 East Hill	EVT3576	CAT, negative results
1990	Excavation of Enclosure 1, Stanway	outside	CAT, LPRIA/early Roman enclosure
1990	St. John's Street Excavations	EVT3172	CAT, Roman building and road
1991	Excavation of lift shaft at Colchester Castle	EVT3173	CAT
1991	Excavations at St. Botolph's Priory	EVT3174	CAT, Roman building and medieval priory buildings
1991	Excavation of enclosures 3 & 4 Stanway	outside	CAT, LPRIA/early Roman enclosures
1991	Excavations at St. Martin's Church	EVT3175	CAT
1992	Excavation of enclosures 3 & 4, Stanway	outside	CAT, LPRIA/early Roman enclosures
1993	Excavation at 24 Lexden Road	EVT3516	Roman building, burials, road
1994	Excavations at 79 Hythe Hill	EVT37	CAT, medieval and post-medieval buildings
1994	Gosbecks Road and land west of Olivers Lane	outside	CAT
1994	Gosbecks both sides of Olivers Lane	outside	CAT
1994	Gosbecks Cropmark	outside	CAT, machine-based evaluation of cropmark
1995	Excavations at St. Mary Magdalen Church	EVT3176	CAT, medieval leper hospital
1995	Gosbecks site A	outside	CAT
1995	Gosbecks site B	outside	CAT, LPRIA and early Roman settlement
1995	Gosbecks temple	outside	CAT, temple and ditch
1995	Gosbecks temple	outside	CAT, Roman temple
1996	Excavation of Colchester Castle well house	EVT3177	CAT
1996	Excavations at Turner Rise, Asda Store,	EVT3178	CAT, Roman cemetery and 1648

1996	1996/7 Gosbecks site C	outside	siegework CAT, early and late Roman cremations
1996	Gosbecks temple	outside	CAT, ditch, ambulatory, portico
1996	Beverley Road	no entry	CAG, Facilis tombstone, Roman road
1997	Evaluation at Turner Rise	EVT3596	CAT
1997	Evaluation at Westway/Sheepen Place	EVT3609	CAT Report 10, negative
1997	Excavations at 147/9 High Street (Jacklins)	EVT3179	CAT Report 12, Roman pottery shop
1997	Excavations at the Mercury Theatre	EVT3607	CAT, Roman buildings and streets
1997	Evaluation at 47 Butt Road	EVT3701	CAT Report 11 and 58, Roman burials
1997	Evaluation at Co-Op, Long Wyre Street	EVT3702	CAT, Roman buildings
1997	Evaluation at former Maternity Home	EVT3608	CAT Report 5, Roman pits
1997	Evaluation plot east of 28 Eld Lane	EVT3605	CAT Report 1, Roman drain?
1997	Evaluation of Northern Approach Road Stage 1	EVT3595	CAT Report 2, LPRIA and Roman ditches
1997	Enclosures 5 & 2, Stanway	outside	CAT, LPRIA/Early Roman enclosures
1997	Evaluation at St. Mary's Hospital	EVT3606	CAT Report 3, Roman buildings
1997	Gosbecks temple	outside	CAT, ditch, portico
1998	Evaluation at 117-19 and 124-5 Hythe Hill	EVT3703	CAT Report 15, post- medieval building
1998	Excavation at the Co op stores, Long Wyre Street	EVT3733	CAT Reports 13, 14 and 44, Roman buildings and streets
1998	Evaluation at 157a- 167 Nth Station Road (Tweeds)	EVT3734	CAT Report 19, post- medieval features
1998	Evaluation at the Old Poultry Market, North Station Rd	EVT3735	CAT Report 21, Roman and post- medieval building
1998	Evaluation at former Moler Works, Hythe	EVT3881	Cotswold Archaeological Trust, negative results
1998	Evaluation at Old Post	EVT4095	AOC, Roman

	Office site, Head Street		buildings and street
1998	Evaluation at Brinkley outside Grove (SAM), Highwoods		CAT Report 31, undated earthwork
1998	Evaluation at St. Peter's House, St. Peter's Street	EVT3736	CAT Report 25, Roman gravel bank, post-medieval piles and pipe
1998	Gosbecks Evaluation for visitor centre	outside	CAT Report 30, Roman LPRIA pits and ditches, LBA pit, Roman water main
1999	Evaluation at 64-76 Hythe Hill	EVT3875	CAT Reports 36 and 125, Medieval and post-medieval buildings
1999	Evaluation at St. Botolph's Priory	EVT3884	CAT Report 39, negative results
1999	Evaluation to rear of Middleborough House (21 Middleborough)	EVT3886	CAT Report 42, medieval finds
1999	Excavation at 64-76 Hythe Hill	EVT3875	CAT, Medieval and post-medieval buildings
1999	Gosbecks Archaeological Park	outside	CAT Report 45, temple enclosure, theatre enclosure
2000	Trial trench in the garden of Tymperleys House, Trinity Street	EVT3865	CAT Report 40 and 74, negative results
2000	Excavations at 22-24 High Street, Colchester	EVT3867	CAT Reports 57 and 101, Roman, medieval and post-medieval buildings
2000	Evaluation at St. Leonard's Church, Hythe Hill	EVT3874	CAT Report 68, churchyard
2000	Excavation at the Garrison sports pitch, Circular Road North	EVT3882	CAT Reports 54 and 138, Roman cremation, medieval or post-medieval features
2000	Evaluation at 63 North Hill, Colchester	EVT3887	CAT Report 64, Roman building
2000	Excavation at 29-39 Head Street	no entry	CAT Report 268, Roman buildings and street, Boudican destruction horizon

2000/1	Excavation at Hollytrees Museum, Castle Park	EVT3958	Cat Report 132, negative results
2001	Evaluation at Topfield, Rawstorn Road	EVT4180	CAT Report 134, Roman pits, ditches and inhumations
2001	Evaluation at 26 West Lodge Road, Colchester	EVT3873	CAT Report 142, Roman cremation
2001	Evaluation at North Station Road nr Victoria Inn	EVT3913	CAT Report 163, Roman building
2001	Excavations at 26 West Lodge Road	EVT3873	CAT Report 80, Roman cremation
2001	Evaluation of Northern Approach Road Phase 3 (Severalls Hospital/ Cuckoo Farm)	no entry	CAT Report 159, post-medieval/modern features
2001	Evaluation at 4 St. Peter's Street	EVT3914	CAT Report 164, Roman or medieval floor surface
2001	Evaluation of land west of Colchester General Hospital	EVT3986	CAT Report 165, LPRIA/Roman linear features
2002	Evaluation to rear of 36 North Hill (Byron's Yard)	EVT4024	CAT Report 177, negative results
2002	Evaluation of west side of St. John's Abbey precinct wall	EVT3941	CAT Report 178, medieval wall
2002	Evaluation of Royal Grammar School playground	EVT4013	CAT Reports 180, negative results
2002	Evaluation of Royal Grammar School playground	EVT4085	CAT Report 179, possible Roman boundary ditch
2002	Evaluation adjacent to 2 Alexandra Road	EVT4008	CAT Report 187, Roman pits
2002	Evaluation at Area C, Colchester Garrison PFI site	EVT3946	CAT Report 197, MIA/LPRIA/Roman field systems and a trackway
2002	Evaluation rear of 25 Head Street	no entry	CAT Report 198, Roman mortar floor and medieval cess pit
2002	Evaluation at Areas E and F, Colchester	no entry	CAT Report 203, LPRIA/Roman field

2002	Garrison PFI site Evaluation at Area KR, Colchester	EVT3939	systems CAT Report 205, LPRIA/Roman
2002	Garrison PFI site Evaluation at Areas A, B, D, GJ, H, J, N, V & YP, Colchester	EVT3946	ditches CAT Report 206, prehistoric pit and Roman burials, pits, ditches and a robbed-out building
2002	Garrison PFI site Evaluation at Areas DR, G, M, P, Q, R, RO, S and P	EVT3945	CAT Report 207, LBA/EIA occupation site with associated pits, elements of an EIA/MIA landscape and LPRIA oppidum fields and trackways
2002	Colchester Garrison PFI site Evaluation at 11 Oaks Drive		CAT Report 209, negative results
2002	Handford House, 1 Queens Road	EVT4032	CAT Report 210, Roman burials
2002	Evaluation at 23 St. Julian's Grove	EVT4034	CAT Report 215, negative results
2002	Evaluation at Elmwood Avenue	EVT3982	CAT Report 216, negative results
2003	Evaluation in the car park of Greyfriars Adult Community College, Castle Road	EVT4039	CAT Report 219, negative results
2003	Evaluation at 2 Sussex Lodge, Sussex Road	EVT2974	CAT Report 220, negative results
2003	Evaluation at 19 Beverley Road	EVT4035	CAT Report 224, Roman road
2003	Excavation at 1 St. Clare Road	EVT3961	CAT Report 225, negative results
2003	Evaluation at 1-2 East Hill	EVT3967	CAT Report 226, post-medieval features
2003	Evaluation on the site outside of the medical centre, Tollgate west, London Road, Stanway		CAT Report 228,
2003	Evaluation at the First Eastern National bus station, Queen Street	EVT3989	CAT Report 234, Roman demolition material, post-medieval features
2003	Evaluation at 7 Ashley Gardens	EVT3955	CAT Report 240, Roman feature
2003	Evaluation at 1,1a & 2	EVT4082	ECC, Roman road

2003	Beverley Road Evaluation at St. Benedict's College, Norman Way	EVT4031	ditch CAT Report 245, negative results
2003	Evaluation at the Globe Hotel, North Station Road	EVT4051	CAT Report 248, Roman buildings
2003	Evaluation at 30 St. Clare Road	EVT3978	CAT Report 250, negative results
2003	Test-pit survey on the Balkerne Heights development (the former St. Mary's Hospital site)	EVT4029	CAT Report 256, Roman town ditch, building and street
2003	Evaluation at 282 Shrub End Road	EVT3979	CAT Report 257, negative results
2003	Excavation of Areas 2, 6, 10 at the Colchester Garrison PFI site	EVT3943	CAT Report 292, MIA enclosure and roundhouse, LPRIA oppidum trackways and field systems, and LPRIA burials
2003/4	Evaluation at the Sixth Form College, North Hill	EVT4128	CAT Report 260, Roman building
2004	Excavation at 'Southern Slopes', on land at Rectory Close	EVT4098	Pre-Construct Archaeology, LPRIA/ Early Roman pits and field boundaries, CAT Report 266, negative results
2004	Evaluation at the Salisbury Hotel, 112 Butt Road	EVT 4087	
2004	Evaluation at Vineyard Gate	EVT4046	CAT Report 269, Roman, medieval and post-medieval features
2004	Evaluation and excavations at Areas C1, C2, E, J1, O, Q and S1 of the Garrison Urban Village	EVT4068	CAT Report 271–4, Neolithic and LPRIA features, Roman circus and cemetery
2004	Evaluation at 38–40 Crouch St	EVT4076	CAT Report 277, House of Crouched Friars
2004	Evaluation at land east of Brook Street	EVT3977	CAT Report 281, medieval/post- medieval pits and ditch
2004	Excavation at 60–66	EVT3954	CAT Report 283,

	East Street		medieval and post-medieval building remains
2004	Evaluation at Area J1 of the Garrison Urban Village	no entry	CAT Report 288, Roman building evidence, road, ditches and burials
2004	Evaluation at the rear of Greyfriars Adult Community College, Castle Road	no entry	CAT Report 290, Roman tessellated pavement
2004	Evaluation at 15 Rawstorn Road	no entry	CAT Report 291, negative results
2004	Evaluation on the site of the Visual Arts Facility, East Hill House and Colchester Bus Station	EVT4136	CAT Reports 295 and 305, Roman demolition material
2004	Evaluation at the rear of 17–18 Osborne Street	EVT4043	CAT Report 297, Early Roman features and medieval pits
2004	Excavation at Handford Place (formerly Handford House), 1 Queens Road	no entry	CAT Report 323, Roman inhumation and cremation burials
2004	Evaluation at the rear of 12 and 13 St. Botolph's Street	EVT4046	CAT Report 298, post-medieval buildings
2004/5	Excavation at the Musket Club, Homefield Road	EVT4067	CAT Report 311, MIA or later enclosure
2004/5	Evaluation and excavation at 15 West Lodge Road	EVT4025	CAT, Roman cremation burials
2004/6	Investigation of the Roman town wall at Roman Road	EVT3994	CAT Report 356, Roman town wall foundations
2005	Evaluation at St. Botolph's car park	EVT4084	ECC, negative results
2005	Excavation at the Sixth Form College, North Hill	EVT4119	CAT, Roman floor surfaces
2005	Evaluation at the attenuation pond site (the south-east corner of the Abbey Field)	EVT3938	CAT Report 320, Roman trackway ditches
2005	Evaluation at the	no entry	CAT Report 331,

2005	Mercury Flats, Balkerne Gardens Evaluation at the corner of Mile End Road and Bruff Close	EVT3966	Roman building remains CAT Report 332, negative results
2005	Evaluation at Lexden Grange, 127 Lexden Road	EVT3964	CAT, Roman pits
2005	Excavation of a Roman temple-tomb at CRGS, 6 Lexden Road	EVT4077	CAT Report 345, temple tomb
2005	Evaluation at Colchester High School, 17 Wellesley Road	EVT3950	CAT Report 352, Roman features including an inhumation and a rubbish pit
2006	Evaluation at St. Helena School drama block, Sheepen Road	EVT4065	CAT Report 351, early Roman pits, ditches and a gulley associated with animal bone, slag, daub and tile
2006	Evaluation of a new car park on the Abbey Field, south of Circular Road North	EVT4105	CAT Report 358, modern military features and an undated trackway ditch
2006	Evaluation at 11 Maldon Road	EVT4171	CAT Report 359, post-medieval pits
2006	Evaluation at the rear of 95–96 High Street	no entry	CAT Report 360, south precinct wall of the Temple of Claudius
2006	Evaluation at 3 Oxford Road	EVT4195	CAT Report 362, Roman road
2006	Evaluation at 14 Vineyard Street	EVT4045	CAT Report 363, Roman extramural ditch
2006	Evaluation at 8 St. Botolph's Street	EVT4044	CAT Report 364, undated gravel surface
2006	Evaluation at the staff and student car-parks, Colchester Institute, Sheepen Road	no entry	CAT Report 368, LPRIA and Roman quarry pits and ditches
2006	Evaluation at the Central Clinic, High Street	EVT4165	CAT Report 372, Roman street and buildings

2006	Evaluation at Colchester High School, 17 Wellesley Road	EVT4022	CAT Report 373, Roman trackway, ditch and pit
2006	Evaluation at the EDFEVT4048 Energy site, Osborne Street		CAT Report 378, medieval and post-medieval building foundations and a wood-lined drain
2006	Evaluation (Stage 2) atno entry the rear of 95–96 High Street		CAT Report 380, Roman monumental arch leading to the Temple of Claudius
2006	Excavation at St. Helena School drama block	EVT4065	CAT Report 384, LPRIA/Roman pits, ditches and a gulley
2006	Evaluation at 38–40 Crouch Street	EVT4124	CAT Report 390, House of the Crouched Friars
2006	Excavation in Balcerne Passage and Balcerne Gardens	EVT4058	CAT Report 395, Roman buildings
2006	Evaluation at 19 Eld Lane	no entry	CAT Report 398, medieval town wall
2006	Evaluation at Alienated Land Area P1 (off Berechurch Road) Colchester Garrison	EVT4196	CAT Report 403, prehistoric/Roman ditch
2007	Evaluation at Alienated Land Area S2 (south) Colchester Garrison	EVT4134	CAT Report 404, prehistoric, Roman and post-medieval ditches
2007	Evaluation at Alienated Land Area B1a (off Berechurch Road) Colchester Garrison	EVT4142	CAT Report 405, Roman, medieval and post-medieval features
2007	Evaluation at Short Cut Road	EVT4189	CAT Report 406, Roman building material
2007	Evaluation in the car-park of Greyfriars Adult Community College, High Street	no entry	CAT Report 408, medieval building, WWII air-raid shelter
2007	Evaluation at Jarmin Road	EVT4175	CAT Report 409, Roman ditches and pits

2007	Evaluation at Alienated Land Area H Colchester Garrison	EVT4107	CAT Report 413, Roman cremation and inhumation burials
2007	Evaluation at St. Helena School, Sheepen Road	no entry	CAT Report 414, Roman pits and wall foundation
2007	Evaluation at Colchester Garrison Church, Military Road	EVT4131	CAT Report 419, Napoleonic military graves
2007	Evaluation in Castle Park putting green and nursery, Colchester	EVT4111	CAT Report 422, test pitting, Roman demolition layer
2007	Excavation at Topfield, Rawstorn Road	EVT4178	CAT Report 423,
2007	Excavation on the Abbey Field car-park, Circular Road North	EVT4197	CAT Report 424, Roman droveway and cremation burials
2007	Excavation at Alienated Land Area S2 (south) Colchester Garrison	EVT4143	CAT Report 428, LBA/EIA roundhouse, medieval and post-medieval field systems
2007	Evaluation at Rawstorn Road (adjacent to Topfield)	EVT4178	CAT Report 429, Roman pits and trackway
2007	Evaluation in Stanwell Street	EVT4121	CAT Report 432, test pit
2007	Evaluation at Alienated Land Area J2, Colchester Garrison	EVT4140	CAT Report 437, Roman field boundaries
2007	Evaluation at Alienated Land Area B1b, Colchester Garrison	EVT4192	CAT Report 438, Roman occupation material (pottery and tile) and burials, Circus, monastic building of St. John's Abbey
2007	Evaluation at Alienated Land Area L/N, Colchester Garrison	EVT4193	CAT Report 456, Roman field system and building remains, modern military buildings
2007	Evaluation at St. John's Green (south of	EVT4172	CAT, undated gravel feature

2007	Southway) Evaluation at Turner Village House	EVT4169	Wessex Archaeology, LPRIA/Roman pits and ditches, palaeo- environmental evidence
2007/8	Evaluation of the proposed extension to the 'south site' buildings at the Sixth Form College, North Hill, 99 High Street 37 Oaks Drive Evaluation at A Barber & Son, 10 William's Walk	EVT4184	CAT Report 483, Roman demolition material CAT Report 440 CAT Report 471

Abbreviations

B = Boudican
 CAG = Colchester Excavation Group
 CAT = Colchester Archaeological Trust
 CEC = Colchester Excavation Committee
 CRGS = Colchester Royal Grammar School
 EAS = Essex Archaeological Society
 ECC = Essex County Council Field Archaeology Unit
 EIA = Early Iron Age
 F = Fortress
 LBA = Late Bronze Age
 LPRIA = Late Pre-Roman Iron Age
 MIA = Middle Iron Age
 PH = Public House
 R = Roman

Tables

<i>site</i>	<i>UAD monument number</i>
Cups Hotel	MON1016
Culver Street	MON549; MON529; MON530; MON531; MON532; MON536
Lion Walk	MON517; MON518; MON519
Church Lane	MON739
Gilberd School	MON268
Angel Yard	MON53
Head Street	GRP91
Waggon and Horses	GRP22
PH, North Hill	

Table 1 Lesser streets in the legionary fortress

<i>site</i>	<i>UAD monument number</i>
Gilberd School	MON267; MON269
Culver Street	MON522; MON523; MON524; MON525; MON526; MON527
Lion Walk	MON462; MON463; MON464; MON465; MON466; MON467
St Mary's Rectory, Church Street	MON733; MON734
Head Street Post Office	ELM1100
Mercury Theatre, Church Street	MON804
St Mary's Cottage, Church Lane	ELM732
6th Form College, North Hill	MON727
Red Lion Hotel	GRP116
NCP Car Park, Nunns Road	MON816

Table 2 Legionary barracks in the fortress

<i>site name</i>	<i>bibliographic reference</i>
Sheepen 1930–9	Hawkes and Hull 1947
St Nicholas's Church 1955–6	Hull 1960
The Colne Temple Complex 1959	Blake 1959
NCP Car Park North Hill 1965	Dunnett 1967
The Telephone Exchange Site 1966	Dunnett 1971d, 7–37
St Mary's Rectory 1967	Dunnett 1971d, 62–77
Sheepen 1970	Niblett 1985
Lion Walk 1971–4	<i>CAR</i> 3, 31–92
Balkerne Lane 1973–6	<i>CAR</i> 3, 93–153
The Cups Hotel 1973–4	<i>CAR</i> 6, 328–38
Culver Street 1981–2, 1984–5	<i>CAR</i> 6, 21–126
Lion Walk United Reformed Church 1984–5	<i>CAR</i> 6, 378–84
The Gilberd School 1984–5	<i>CAR</i> 6, 127–39
Head Street 2000	Brooks 2004a

Table 3 Major excavations in the early colonia

<i>modern street name (earliest reference)</i>	<i>first record</i>
Abbeygate Street (Lodders or Ladders Lane)	mid-13th century
Childwell Alley (Cheldervelle Lane)	1340
Culver Street or Lane	1334
Eld Lane (le Oldelond)	1341
Head Street (Have[d]strata)	1173
High Street (western end called Cornhill)	1337
Lion Walk (Cat Lane)	1320
Maidenburgh Street (Maidenborough)	1312
Magdalen Street (Magdeleyn Lane)	1272
North Street	1196
Pelhams Lane (Whitefoots Lane)	1306

Priory Street (Moore Street)	1275
Queen Street (South Street or Southgate Street)	1333
St. Peter's Street (Fowles Lane)	1330
Stanwell Street	1341
Stockwell, Stockwell Street	1329
West Stockwell Street	1327
Vineyard Street (Beres Lane)	1312
Long Wyre Street (Wirstrate)	1277

(source: *CAR1*, 79)

Table 4 Earliest documentary reference to medieval streets

houses/buildings	Colchester	Saffron Walden
14th century	4	4
15th century	19	28
16th century	43	71
17th century	68	29
<i>total</i>	134	132

Table 5 Analysis of medieval and early modern houses and 'buildings' on the statutory lists for Colchester and Saffron Walden by century

name	UAD no.	date	description
Rose and Crown Hotel, East Street	MON277	late 13th- or early 14th-century	an aisled structure of three unequal bays
no. 7 Trinity Street	MON196	late 15th or early 16th century?	a small, but impressive, open hall; of two equal bays, remains of a public building?
nos. 7–9 Queen Street	MON187	possibly late 14th-century	two-bay cross-wing
No. 93 Hythe Hill	MON11	late medieval, jettied	a two-bay cross-wing with evidence for a shop front (now under-built)
no. 8 Trinity Street	MON197	15th-century date?	high-quality cross-wing of
no. 39 East Hill	MON238	late medieval	two-bay, jettied, cross-wing
no. 98 Hythe Hill	MON13	mid- to late 14th-century	a jettied cross-wing, probably originally of three bays with an overshot cross-passage
Bay House, West	MON160	14th-century date?	The front room was a shop, possibly the earliest surviving in the town
			two adjoining cross-

Stockwell Street (Fig 1)			wings? The two-bayed structure now seems to be the only example of this popular building type to survive in Colchester.
no. 3 West Stockwell Street (Fig 2)	MON40	15th-century	This merchant's house is one of the most conspicuous and photographed medieval buildings in the town.
Bonnars, 37 Long Wyre Street	MON193	early 15th century?	tall two-bay cross-wing
nos. 5–7 Stockwell	MON164	15th-century	remarkable three-bay building with one large chamber on the first floor. This is described as 'the old wool hall' in a 17th-century deed in the possession of the owner.
nos. 13–15 North Hill	MON129	part of early 15th-century structure	two parallel ranges forming a double pile building
no. 6 Trinity Street	MON195	mid-6th-century	part cross-wing
Red Lion Hotel, High Street	MON34	late 15th century?	perhaps the most significant surviving timber-framed building in Colchester. Probably first built as a town house by the noble Howard Family, by 1515 it had become an inn. Earliest part is jettied two-bay block, within a few years, it came to form part of an H-plan complex.
Ye Olde Marquise (formerly Marquis of Granby), 24 North Hill	PH MON132	1520s	standard long-wall jettied house, remarkable for its elaborate decoration.
no. 23 North Hill	MON309	late medieval	long-wall jetty building of narrow plan form
no. 37 (former Castle	MON134	late medieval	long-wall jetty house

Book Shop), North Hill			
no. 118 High Street	MON113	late medieval	three-storeyed building

Table 6 Significant surviving late medieval buildings in Colchester

<i>site location</i>	<i>UAD no.</i>	<i>reference</i>
Lion Walk	MON 492	CAR 3, 78–81
Middleborough	MON 332	CAR 3, 189–98
Middleborough	MON 333	CAR 3, 199–209
64–76 Hythe Hill		CATB 197–9; Benfield 2001
79 Hythe Hill	MON 22/23	Brooks 2000, 114–16
Angel Yard	MON 55	Shimmin and Carter 1996, 42–57
12–13 Middleborough	MON 76	Crummy 1984b, 206–8 CAT 3/87b

Table 7 Excavated post-medieval buildings in Colchester

Bibliography

Colchester Archaeological Reports (CAR)

- CAR 1 Aspects of Anglo-Saxon and Norman Colchester* (Crummy, P 1981, reprinted 1995)
- CAR 2 The Roman small finds from excavations in Colchester, 1971–9* (Crummy, N 1983, reprinted 1995)
- CAR 3 Excavations at Lion Walk, Balmerne Lane, and Middleborough, Colchester Essex* (Crummy, P 1984)
- CAR 4 The coins from excavations in Colchester 1971–9* (Crummy, N (ed) 1987)
- CAR 5 The post-Roman small finds from excavations in Colchester, 1971–85* (Crummy, N 1988)
- CAR 6 Excavations at Culver Street, the Gilberd School, and miscellaneous sites in Colchester, 1971–85* (Crummy, P 1992)
- CAR 7 Post-Roman pottery excavations in Colchester, 1971–85* (Cotter, J P 2000)
- CAR 8 Roman vessel glass from excavations in Colchester, 1971–85* (Cool, H E M and Price, J 1995)
- CAR 9 Excavations of Roman and later cemeteries, churches and monastic sites in Colchester, 1971–88* (Crummy, N, Crummy, P and Crossan, C 1993)
- CAR 10 Roman pottery from excavations in Colchester, 1971–86* (Symonds, R P and Wade, S; Bidwell, P and Croom, A (ed) 1999)
- CAR 11 Camulodunum 2* (Hawkes, C F C and Crummy, P 1995)
- CAR 12 Animal bone from excavations in Colchester 1971–85* (Luff, R 1993)

Other cited works

- Adkins, P 1989 'Rook Hall'. *Curr Archaeol* **115**, 262–3
- Adkins, R A and Petchey, M R 1984 'Secklow Hundred mound and other meeting place mounds in England'. *Archaeol J* **141**, 243–51
- Ager, B 1986 'A cruciform brooch said to be from Colchester'. *Essex Archaeol Hist* **16** (1983–4), 149–50
- Alcock, J P 2001 *Food in Roman Britain*. Stroud: Tempus
- Allen, D A 1983 'Roman glass from selected British sites'. Unpublished PhD thesis, Univ Wales, Cardiff
- Andrew, W J 1905 'Buried treasure: some traditions, records and facts'. *Brit Numis J* (1st series) **1**, 9–59
- Andrews, D D and Stenning, D F 1996 'More Maldon Wealdens. The origins and development of the King's Head, Maldon High Street'. *Essex Archaeol Hist* **27**, 214–25
- Anon 1844 'Proceedings of the Central Committee'. *Archaeol J* **1**, 156–68
- Anon 1928 *Feet of Fines for Essex II*. Colchester: Essex Archaeol Soc
- Anon 1965 *Challenge Accepted: Preliminary Report on Excavations in Colchester 1964–1965*. Colchester: Colchester Excavation Committee
- Appleby, R J M 1952 'Westhouse Farm, 1937'. Unpublished excavation report, Colchester Museums archives
- Archer, I A, 2000 'Politics and government 1540–1700', in Clarke, P (ed) *Cambridge Urban History of Britain ii 1540–1840*. Cambridge: Cambridge University Press, 235–62

- Archibald, M M and Cook, B J 2001 *English Medieval Coin Hoards: I Cross and Crosslets, Short Cross and Long Cross Hoards* (British Museum Occasional Paper **87**). London: British Museum Press
- Ashton, N, McNabb, J and Parfitt, S 1992 'Choppers and the Clactonian: a reinvestigation'. *Proc Prehist Soc* **58**, 21–8
- Ashton, N, McNabb, J, Irving, B, Lewis, S and Parfitt, S 1994 'Contemporaneity of Clactonian and Acheulian flint industries at Barnham, Suffolk'. *Antiquity* **68** (260), 585–9
- Astley, H J D 1903 'Medieval Colchester: town, castle and abbey, from MSS in the British Museum'. *Trans Essex Archaeol Soc* **8**, 117–38
- Atkinson, M and Preston, S J 1998 'The late Iron Age and Roman settlement at Elms Farm, Heybridge, Essex, excavations 1993–5: an interim report'. *Britannia* **29**, 85–110
- Atkinson, M and Preston, S J nd *Hidden Heybridge*. Chelmsford: Essex County Council
- Austen, P S 1991 *Bewcastle and Old Penrith: A Roman Outpost and a Frontier Vicus* (Cumberland and Westmorland Antiquarian Society Research Series **6**). Kendal
- Austin, C 1998 'An archaeological evaluation at 117–119 and 124–125 Hythe Hill, Colchester'. *CAT Report* **15**
- Ayers, B, 2000 'Anglo-Saxon, medieval and post-medieval (urban)', in Brown, N and Glazebrook, J *Research and Archaeology: A Framework for the Eastern Counties 2. Research Agenda and Strategy* (E Anglian Archaeol Occasional Paper **8**). Norwich: Scole Archaeological Committee, 27–32
- Bale, R 1985 'The Braintree Intaglio and the worship of Asklepios'. *Essex J* **20.2**, 27–9
- Barber, B and Bowsher, D 2000 *The Eastern Cemetery of Roman London: Excavations 1983–1990* (MoLAS Monogr **4**). London: MoLAS
- Barford, P M 1987 'A fragment of Roman stucco from Colchester'. *Britannia* **XVIII**, 273–4
- Barford, P M 1990 'Briquetage from inland sites' in Fawn, J, Evans, K A, McMaster, I and Davies, G M R *The Red Hills of Essex: Salt-Making in Antiquity*. Colchester: Colchester Archaeol Group, 79–80
- Barford, P M 2000 'Marshland-inland relationships in Roman Essex: sheep, salt-licks and seasonal salters', *Essex Archaeol Hist* **31**, 276–9
- Barrett, C R B 1893 *Colchester and Lexden* (Barrett's Illustrated Guides: Eastern Counties no. **11**). London: Lawrence and Bullen
- Bartlett, R 1987 'A late Roman buckle from Harlow Temple, Essex'. *Essex Archaeol Hist* **18**, 115–20
- Bedwin, O (ed) 1996 *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council
- Benfield, S 1994 'Archaeological Assessment at Gosbecks Farm 1994'. *CAT Report* **2/94a**
- Benfield, S 1997a 'An archaeological evaluation on the line of the Colchester Northern Approach Road. Stage 1: Turner Road to Boxted Road'. *CAT Report* **2**
- Benfield, S 1997b 'An archaeological evaluation at 47 Butt Road, Colchester'. *CAT Report* **11**
- Benfield, S 1998a 'Excavations and observations at the former Jacklins shop, 147 High Street, Colchester'. *CAT Report* **12**
- Benfield, S 1998b 'Gosbecks Archaeological Park, Colchester: an archaeological evaluation of the north-west area, 1998'. *CAT Report* **30**
- Benfield, S 1998c 'An archaeological evaluation at St Peter's House, St Peter's Street, Colchester'. *CAT Report* **25**
- Benfield, S 1998d 'Brinkley Grove: an investigation of a scheduled earthwork to the north

- of Colchester'. *CAT Report* **31**
- Benfield, S 1999 'Watching brief at 40 Osborne Street'. *CAT Report* **41**
- Benfield, S 2000a 'An excavation at 47 Butt Road, Colchester'. *CAT Report* **58**
- Benfield, S 2000b 'Excavation and recording at 11 Short Wyre Street, Colchester, Essex in 1988'. *CAT Report* **113**
- Benfield, S 2002 'Excavations at 64–76 Hythe Hill, Colchester, Essex (1999)', *J Colchester Archaeol Trust* **2 (for the year 2002)**, 34–57
- Benfield, S 2007 'The lost church of the Crossed Friars'. *Colchester Archaeol* **20**, 19–23
- Benfield, S 2008a 'Excavations of late Iron and Roman features and a Roman road north of Gosbecks Archaeological Park, Colchester, Essex, 1995–96'. *CAT Report* **127**
- Benfield, S 2008b 'Under the church of the Crossed Friars'. *Colchester Archaeol* **21**, 22–3
- Benfield, S in prep a 'Report on excavations at Gosbecks, Colchester'. Colchester Archaeological Trust
- Benfield, S in prep b 'Report on excavations at St Marys Hospital, Colchester'. Colchester Archaeological Trust
- Benfield, S and Brooks, H 1999 'Prehistoric and Roman enclosures at Abbotstone Quarry, Stanway, Colchester'. *Tarmac Papers* (The Archives and History Initiative of Tarmac plc) **3**, 3–9
- Benfield, S and Garrod, S 1992 'Two recently-discovered Roman buildings in Colchester'. *Essex Archaeol Hist* **23**, 25–38
- Benham, H 1979 *Some Essex Water Mills*. Colchester: Essex County Newspapers
- Benham, W G 1902 *The Red Paper Book of Colchester*. Colchester: Essex County Standard
- Benham, W G 1907 *The Oath Book or Red Parchment Book of Colchester*. Colchester: Essex County Standard
- Bertrand, I 2008 *Le travail de l'os, du bois de cerf et de la corne à l'époque romaine* (Monographies Instrumentum **34**). Montagnac: M. Mergoil
- Besombes, P-A and Barrandon, J-N 2000 'Nouvelles propositions de classement des monnaies 'bronze' de Claude I'. *Revue Numismatique* **155**, 161–88
- Biddle, M and Hill, D 1971 'Late Saxon planned towns'. *Antiq Journal* **51**, 70–85
- Biddle, M and Hudson, D 1973 *The Future of London's Past: A Survey of the Archaeological Implications of Planning and Development in the Nation's Capital*. Worcester: Rescue
- Birchall, A 1965 'The Aylesford-Swarling Culture: The Problem of the Belgae reconsidered'. *Proc Prehist Soc* **31**, 241–367
- Bird, B 1987 *Rebel Before His Time: The Story of John Ball and the English Peasants' Revolt of 1381*. Worthing: Churchman Publishing
- Bishop, M C and Coulston, J C N 1993 *Roman Military Equipment from the Punic Wars to the Fall of Rome*. London: Batsford
- Black E W 1986 'Romano-British burial customs and religious beliefs in South-East England'. *Archaeol J* **143**, 201–39
- Black, E W 1990 'British chariotry and territorial *oppida*'. *Essex Archaeol Hist* **21**, 142–3
- Black, E W 1992 'A pre-Boudican bath-building at Colchester'. *Essex Archaeol Hist* **23**, 120–3
- Black, E W 2001 'Report on the Roman brick and tile', in Orr, K 'An archaeological evaluation at North Station Road (adjacent to the Victoria Inn), Colchester, Essex August 2001'. *CAT Report* **163**, 12
- Blackburn, M A S, Bonser, M J and Conte, W J 1993 'A new type of Edward the Confessor for the "Newport" mint'. *Brit Numis J* **63**, 125–6
- Blagg, T F C 1990 'First-century Roman houses in Britain and Gaul', in Blagg, T F C and

- Millett, M J (eds) *The Early Roman Empire in the West*. Oxford: Clarendon Press, 194–209
- Blair, J 1984 'The Anglo Saxon period', in Morgan, K O (ed) *The Oxford Illustrated History of Britain*. Oxford: Oxford University Press, 52–103
- Blake, B 1959a 'Excavations in Stockwell, Colchester, August and September 1958'. *Colchester Archaeol Group Ann Bull* **2**, 7–9
- Blake, B 1959b 'Romano-Celtic temple, Sheepen, Colchester'. *Colchester Archaeol Group Ann Bull* **2**, 36–7
- Blake, B 1964 'Excavations at Lorgarth, Nunn's Road, Colchester'. Unpublished report, Colchester Museums archives
- Blake, B P, Hurst, J G and Gant, L H 1961 'Medieval and later pottery from Stockwell Street, Colchester'. *Trans Essex Archaeol Soc* **1**, 41–51
- Boekel, G van 1986 'Roman terracotta figurines and masks from the Netherlands'. *Berichten ROB (Amersfoort)* **36**, 25–404
- Boon, G C 1974 *Silchester – The Roman Town of Calleva*. Newton Abbot: David & Charles
- Borrill, H 1981 'Casket Burials', in Partridge, C *Skeleton Green: A Late Iron Age and Romano-British Site (Britannia Monogr Ser 2)*. London: Society for the Promotion of Roman Studies, 304–21
- Borsay, P 1989 *The English Urban Renaissance: Culture and Society in the Provincial Town, 1660–1770*. Oxford: Clarendon Press
- Boyden, P 1986 'A study in the structure of landholding and administration in Essex in the late Saxon period'. Unpublished PhD thesis, Westfield College, London
- Bradley, R 1978a *The Prehistoric Settlement of Britain*. London, Routledge & Kegan Paul
- Bradley, R 1978b 'Prehistoric field systems in Britain and north-west Europe – a review of some recent work'. *World Archaeol* **9**, 265–80
- Braithwaite, G 1984 'Romano-British face pots and head pots'. *Britannia* **15**, 99–131
- Brasier, M D 1986 'Excavation at 147 Lexden Road, Colchester'. *Essex Archaeol Hist* **16**, 145–9
- Breeze, A 2004 'The god Silvanus Callirius and *RIB* **194**, from Colchester'. *Britannia* **XXXV**, 228–9
- Breeze, D 1984 'Demand and supply on the northern frontier', in Miket, R and Burgess, C (eds) *Between and beyond the walls, essays on the prehistory and history of northern Britain in honour of George Jobey*. Edinburgh: Donald, 264–86
- Brigham, T 1992 'Basilica studies', in Milne, G (ed) *From Roman Basilica to Medieval Market*. London: HMSO, 106–13
- British Museum 1924 *A Guide to the Mediaeval Antiquities and Objects of Later Date in the Department of British and Mediaeval Antiquities*. Oxford: British Museum
- Britnell, R H 1981 'Essex markets before 1350'. *Essex Archaeol Hist* **13**, 15–21
- Britnell, R H 1982 'The Oath Book of Colchester and the Borough Constitution, 1372–1404'. *Essex Archaeol Hist* **14**, 94–101
- Britnell, R H 1986a 'Colchester courts and court records, 1310–1525'. *Essex Archaeol Hist* **17**, 133–40
- Britnell, R H 1986b *Growth and Decline in Colchester, 1300–1525*. Cambridge: Cambridge University Press
- Britnell, R H 1988 'The fields and pastures of Colchester 1280–1350'. *Essex Archaeol Hist* **19**, 159–65
- Britnell, R H 1990 'Bailiffs and burgesses of Colchester 1400–1525'. *Essex Archaeol Hist* **21**, 154–63

- Britnell, R H and a *Colchester Deeds of the Fourteenth and Fifteenth Centuries from the Archives of the Mercers' Company of London, Cartulary of Dean John Colet* <<http://www.dur.ac.uk/r.h.britnell/Colchester%20Deeds%201.htm>> accessed 5 December 2008
- Britnell, R H and b *Colchester in the Early Fifteenth Century: A Portrait* <<http://www.dur.ac.uk/r.h.britnell/Portrait%201.htm>> accessed 5 December 2008
- Brooks, C and Hodges, R 1983 'Imported pottery in eastern Britain c 1200–1500 – an interim appraisal of the evidence', in Davey, P and Hodges, R (eds) *Ceramics and Trade: The Production and Distribution of Later Medieval Pottery in North-West Europe* (Proceedings of the MPRG annual conference at Hull, 1980). *Sheffield*: Univ Sheffield Dept Prehist Archaeol, 231–55
- Brooks, H 1997a 'St Mary's Hospital, Colchester, archaeological evaluation'. *CAT Report 3*
- Brooks, H 1997b 'Co-operative Society stores, Long Wyre Street, Colchester, archaeological evaluation'. *CAT Report 14*
- Brooks, H 1997c 'Watching brief report, 67 Castle Road, Colchester'. *CAT Report 7/97c*
- Brooks, H 1998 'Watching brief report, Northgate Centre, North Station Road, Colchester'. *CAT Report 2/98b*
- Brooks, H 1999a 'A trial-trenching evaluation of a cropmark site at Abbotstone, Stanway, Colchester, Essex'. *CAT Report 28*
- Brooks, H 1999b 'An archaeological trial-trenching evaluation rear of Middleborough House (21 Middleborough), Colchester, Essex'. *CAT Report 42*
- Brooks, H 2000 'Excavations at 79 Hythe Hill, Colchester, 1994–5'. *Essex Archaeol Hist* **31**, 112–24
- Brooks, H 2001 'A Bronze Age occupation site at Frog Hall Farm, Fingringhoe, Essex: 1975–76 excavations'. *CAT Report 123*
- Brooks, H 2002a 'Major excavations begin at St Mary's Hospital'. *Colchester Archaeol* **15**, 10–14
- Brooks, H 2002b 'An archaeological evaluation on the west side of St John's Abbey precinct wall, along Mersea Road, Colchester, Essex'. *CAT Report 178*
- Brooks, H 2004a 'An archaeological excavation and a watching brief at 22–24 High Street, Colchester, in 2000'. *J Colchester Archaeol Trust* **2** (for the year 2002), 62–85
- Brooks, H 2004b 'Archaeological excavation at 29–39 Head Street, Colchester, Essex'. *CAT Report 268*
- Brooks, H 2004c 'Excavations at 21–31 Long Wyre Street, Colchester, in 1998'. *J Colchester Archaeol Trust* **1** (for the year 2001), 26–103
- Brooks, H 2004d 'An archaeological evaluation at the rear of Middleborough House (21 Middleborough), Colchester, in 1999'. *J Colchester Archaeol Trust* **2** (for the year 2002), 21–33
- Brooks, H 2005a 'Archaeological monitoring and recording at the Sixth Form College, North Hill, Colchester, Essex, February 2005'. *CAT Report 309*
- Brooks, H 2005b 'An archaeological excavation and watching brief at the Musket Club, Homefield Road, Colchester, Essex, December 2004–February 2005'. *CAT Report 311*
- Brooks, H 2006a 'Colchester before Colchester', in Ottaway, P (ed) *A Victory Celebration: Papers on the Archaeology of Colchester and Late Iron Age–Roman Britain presented to Philip Crummy*. Colchester: Friends of Colchester Archaeological Trust, 5–10
- Brooks, H 2006b 'An archaeological evaluation rear of 95–96 High Street, Colchester, Essex, January 2006'. *CAT Report 360*
- Brooks, H 2006c 'A Roman temple-tomb at Colchester Royal Grammar School, 6 Lexden Road, Colchester, Essex, August–September 2005'. *CAT Report 345*

- Brooks, H 2008 'Colchester Institute'. *Colchester Archaeol* **21**, 11–13
- Brooks, H 2009 'Back to school'. *Colchester Archaeol* **22**, 2–7
- Brooks, H and Austin, C 2000 'An archaeological evaluation at Lexden Wood Golf Club (Westhouse Farm), Lexden, Colchester, Essex: January 2000'. *CAT Report* **59**
- Brooks, H, Benfield, S and Garrod, S 1995 'Archaeological assessment at Gosbecks Farm, Colchester, 1994'. *Essex Archaeol Hist* **26**, 261–4
- Brooks, H, Crummy, N and Archibald, M M 2004 'A medieval lead canister from Colchester High Street: hoard container, or floor safe?'. *Medieval Archaeol* **48**, 131–42
- Brooks, H and Masefield, R 2005 'The Colchester Garrison PFI project, Colchester, Essex: a report on the 2003 excavation of Areas 2, 6, 10, August–November 2003. *CAT Report* **292**
- Brooks, H, Holloway, B and Masefield, R 2008 'Stage 1b archaeological evaluation, Alienated Land Area B1b, Colchester Garrison, Colchester, Essex, July–September 2007'. *CAT Report* **438**
- Brooks, H, Clarke, W, Górniak, M and Pooley, L, 2009 'Roman buildings, the rear face of the town wall and archaeological investigations in Insulas 1a, 2b, 9a, 9b at the Sixth Form College, North Hill, Colchester, Essex, April 2005–March 2006'. *CAT Report* **347**
- Brown, N 1986 'West Mersea', in Priddy, D (ed) 'Work of the Essex County Council Archaeology Section 1983–84'. *Essex Archaeol Hist* **16** (1983–4), 104
- Brown, N 1995 'Ardleigh reconsidered: Deverel-Rimbury pottery in Essex'. Unpublished gazetteer
- Brown, N 1996 'The archaeology of Essex c 1500–500 BC', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 26–37
- Brown, N 1999 *The Archaeology of Ardleigh, Essex: Excavations 1955–1980* (E Anglian Archaeol Rep **90**). Chelmsford: Essex County Council
- Brown, N and Glazebrook, J 2000 *Research and Archaeology: A Framework for the Eastern Counties 2. Research Agenda and Strategy* (E Anglian Archaeol Occasional Paper **8**). Norwich: Scole Archaeological Committee
- Brown, N and Lavender, N J 1994 'Later Bronze Age sites at Great Baddow and settlement in the Chelmer valley, Essex, 1500–500 BC'. *Essex Archaeol Hist* **25**, 3–13
- Brown, N and Murphy, P 2000 'Neolithic and Bronze Age', in Brown, N and Glazebrook, J (ed) *Research and Archaeology: A Framework for the Eastern Counties 2. Research Agenda and Strategy* (E Anglian Archaeol Occasional Paper **8**). Norwich: Scole Archaeological Committee, 9–13
- Brown, R A 1969 *The Normans and the Norman Conquest*. London: Constable
- Brown, R A and Colvin, H M 1963 'The royal castles 1066–1485', in Colvin, H M (ed) *The History of the King's Works*, vol II. London: HMSO, 553–894
- Bryant, S 2000 'The Iron Age', in Brown, N and Glazebrook, J (ed) *Research and Archaeology: A Framework for the Eastern Counties 2. Research Agenda and Strategy* (E Anglian Archaeol Occasional Paper **8**). Norwich: Scole Archaeological Committee, 14–19
- Buckler, G 1856 *Twenty-two of the Churches of Essex Architecturally Described and Illustrated*. London
- Buckler, G 1876 *Colchester castle, a Roman Building, and the Oldest and Noblest Monument of the Romans in Britain*. Colchester: Benham and Harrison
- Buckley, D G 2000 'Lost and found: The archaeology of the Essex coast', in Aberg, A and Lewis, C (eds) *The Rising Tide: Archaeology and Coastal Landscapes*. Oxford: Oxbow, 5–

- Buckley, D G (ed) 1980 *Archaeology in Essex to AD 1500* (CBA Res Rep **34**). London: CBA
- Buckley, D G and Hedges, J D 1987 *The Bronze Age and Saxon Settlements at Springfield Lyons, Essex: An Interim Report* (Essex County Counc Occas Pap 5). Chelmsford: Essex County Council
- Buckton, D 1986 'Late 10th- and 11th-century *cloisonné* enamel brooches'. *Medieval Archaeol* **30**, 8–18
- Budd, P 2000 'Meet the metal makers'. *Brit Archaeol* **56**, 12–17
- Burgess, R W 1990 'The Dark Ages return to fifth-century Britain: the 'restored' Gallic chronicle exploded'. *Britannia* **XXI**, 185–96
- Burnett, A 1984 'Clipped siliquae and the end of Roman Britain'. *Britannia* **15**, 163–8
- Camden, W 1772 *Britannia*, 4th English edn. London
- Campbell, B 1996 'Shaping the rural environment: surveyors in ancient Rome'. *J Roman Stud* **LXXXVI**, 74–99
- Campbell, J, John, E and Wormald, P 1982 *The Anglo-Saxons*. Oxford: Phaidon
- Carrick, M 1989 'Sixteenth and seventeenth century domestic wall paintings in the county of Essex'. Unpublished MPhil thesis, Univ Essex
- Carter, H M 1969 'Claudian building material from Colchester Castle'. *Colchester Archaeol Group Ann Bull* **12**, 21–2
- Carter, H M 1971 'Anglo-Saxon carving from West Mersea church'. *Colchester Archaeol Group Ann Bull* **14**, 37
- Cater, W A 1919 'Notes on the origin and location of the church of St Giles, Colchester'. *J Brit Archaeol Ass* **25**, 213–20
- Chalklin, C W 2000 'South east', in Clarke, P (ed) *Cambridge Urban history of Britain ii 1540–1840*. Cambridge: Cambridge University Press, 49–66
- Charleston, R J 1991 'Vessel glass', in Blair, J and Ramsay, N (eds) *English Medieval Industries*. London: Hambledon Press, 237–64
- Charlesworth, D 1959 'Roman glass in northern Britain'. *Archaeologia Aeliana* **37**, 33–58
- Christy, M 1928 'The Essex hundred-moots: an attempt to identify their meeting-places'. *Trans Essex Archaeol Soc* **XVIII**, 172–97
- Christy, M, Porteous, W W and Smith, E B 1915 'The monumental brasses of Colchester'. *Trans Essex Archaeol Soc* **XIII**, 38–52
- Clapham, A W 1926 'A carved marble lion from Colchester'. *Antiq* **JVI**, 450–1
- Clark, J 1989 *Saxon and Norman London*. London: HMSO
- Clark, P 1995 *Small Towns in Early Modern Europe* (Themes in international urban history). Cambridge: Cambridge University Press
- Clark, P 2000 *Cambridge Urban History of Britain ii 1540–1840*. Cambridge: Cambridge University Press
- Clarke, D T-D 1971 'Six years hard labour: a report from Colchester'. *Essex J* **6(3)**, 63–6
- Clarke, D T-D and Davies, G M R 1979 *Roman Colchester*. Colchester: Colchester & Essex Museum
- Clarke, D T-D, Seaby, W A and Stewart, I 1974 'The 1969 Colchester hoard'. *Brit Numis J* **44**, 39–61
- Clarke, D W 1942–5 'A perambulation of the Dutch quarter of Colchester, Thursday, 21 August, 1941'. *Trans Essex Archaeol Soc* **XXIII**, 375–8
- Clarke, G 1979 *Pre-Roman and Roman Winchester: Part 2: The Roman Cemetery at Lankhills* (Winchester Studies 3). Oxford: Oxford University Press
- Clarke, P 1991 'Brightlingsea'. *Current Archaeol* **11(6)**, 272–3

- Clifford, E M 1933 'The Roman villa, Hucclecote, near Gloucester'. *Trans Bristol Gloucestershire Archaeol Soc* **55**, 323–76
- Clifford, E M 1961 'The Hucclecote Roman villa'. *Trans Bristol Gloucestershire Archaeol Soc* **80**, 42–9
- Collis J, 1984 *Oppida: Earliest Towns North of the Alps*. Sheffield: University of Sheffield
- Colvin, H M 1963 'The Norman kings 1066–1154', in Colvin, H M (ed) *The History of the King's Works*, vol I. London: HMSO, 19–50
- Cool, H E M 2006 'Sustenance in a strange land', in Ottaway, P J (ed) *A Victory Celebration: Papers on the Archaeology of Colchester and Late Iron Age–Roman Britain presented to Philip Crummy*. Colchester: Colchester Archaeological Trust, 75–82
- Cooper, J 2000 'Church dedications in the Colchester archdeaconry'. *Essex Archaeol Hist* **31**, 161–8
- Cooper, J 2003 'History of St Mary Magdalen's hospital', in Crossan, C 'Excavations at St Mary Magdalen's hospital, Brook Street, Colchester'. *Essex Archaeol Hist* **34**, 91–5
- Cotter, J 1996 'The post-Roman pottery', in Shimmin, D and Carter, G 'Excavations at Angel Yard, High Street, Colchester 1986 and 1989'. *Essex Archaeol Hist* **27**, 72–3
- Cotton, M A 1962 'The Norman bank of Colchester Castle'. *Antiq J* **XLII**, 57–61
- Couchman, C R 1980 'The Bronze Age in Essex', in Buckley, D G (ed) *Archaeology in Essex to AD 1500* (CBA Res Rep **34**). London: CBA, 40–6
- Cowgill, J, de Neergaard, M and Griffiths, N 1987 *Knives and Scabbards* (Medieval Finds from Excavations in London **1**). London: HMSO
- Cowie, R and Harding, C 2000 'Saxon settlement and economy from the Dark Ages to Domesday', in Kendall, M (ed) *The Archaeology of Greater London: An Assessment of Archaeological Evidence for Human Presence in the Area now Covered by Greater London*. London: Museum of London
- Creighton, J 2000 *Coins and Power in Late Iron Age Britain*. Cambridge: Cambridge University Press
- Creighton, J 2001 'The Iron Age–Roman transition', in James, S and Millet, M (eds) *Britons and Romans: Advancing an Archaeological Agenda* (CBA Research Report **125**). York: CBA, 4–11
- Creighton, J 2006 *Britannia; the creation of a Roman province*. London: Routledge
- Crittenden, P W 1967 'Report of an excavation in the grounds of the Royal Grammar School, 1964'. *Colchester Archaeol Group Annu Bull* **10**, 2–3
- Crossan, C 1990 'The house of Lazarus'. *Colchester Archaeol* **3**, 8–11
- Crossan, C 1991 'St Mary Magdalen's Hospital'. *Colchester Archaeol* **4**, 19–20
- Crossan, C E 1992 'St Botolph's Priory church'. *Essex Archaeol Hist* **23**, 103
- Crossan, C E 1996 'The missing link: Mary Magdalen medieval leper house'. *Colchester Archaeol* **9** (1995–6), 8–11
- Crossan, C E 1998a 'Watching brief at Williams & Griffin, 155 High Street'. *CAT Report* **8/98E**
- Crossan, C E 1998b 'Evaluation: the Old Poultry Market Site, North Station Road, Colchester'. *CAT Report* **21**
- Crossan, C E 1999a 'Archaeological evaluation at St Botolph's Priory, Colchester'. *CAT Report* **39**
- Crossan, C E 1999b 'The Old Poultry Market Site, North Station Road, Colchester – watching brief report'. *CAT Report* **38**
- Crossan, C E 2000a 'A watching brief at The Lindens, 139 Lexden Road, Colchester (Phase 1)'. *CAT Report* **48**

- Crossan, C E 2000b 'A watching brief at Colchester Institute car park'. *CAT Report* **49**
- Crossan, C E 2000c 'A watching brief and excavation at Sovereign Crescent, Colchester (formerly Colchester maternity hospital)'. *CAT Report* **46**
- Crossan, C E 2000d 'Evaluation at 26 West Lodge Road, Colchester'. *CAT Report* **80**
- Crossan, C E 2001a 'Roman burial ground – cremation cemetery under a sports field'. *Colchester Archaeol* **14**, 5–7
- Crossan, C E 2001b 'An archaeological evaluation on land west of Colchester General Hospital (West District Sites)'. *CAT Report* **165**
- Crossan, C E 2003 'Excavations at St Mary Magdalen's hospital, Brook Street, Colchester'. *Essex Archaeol Hist* **34**, 91–154
- Crossan, C E and Masefield, R 2004 'Camulodunum East'. *Colchester Archaeol* **17**, 14–21
- Crummy, N 1981 'Bone-working at Colchester', *Britannia* **12**, 277–85
- Crummy, N 1996a 'The small finds', in Shimmin, D and Carter, G 'Excavations at Angel Yard, High Street, Colchester 1986 and 1989'. *Essex Archaeol Hist* **27**, 73–80
- Crummy, N 1996b 'Summary of the Roman and post-Roman brick and tile', in Shimmin, D and Carter, G 'Excavations at Angel Yard, High Street, Colchester 1986 and 1989'. *Essex Archaeol Hist* **27**, 81–2
- Crummy, N 1999 'The leather from Trench 2, context D', in Brooks, H 'An archaeological trial-trenching evaluation rear of Middleborough House (21 Middleborough), Colchester, Essex'. *CAT Report* **42**, 25–31
- Crummy, N 2000 'The small finds', in Brooks, H 'Excavations at 79 Hythe Hill, Colchester 1994–5'. *Essex Archaeol Hist* **31**, 119–22
- Crummy, N 2001a 'The small finds', in Brooks, H 'Excavations at 21–31 Long Wyre Street, Colchester, in 1998'. *J Colchester Archaeol Trust* **1** (for the year 2001), 33–6
- Crummy, N 2001b 'Bone-working in Roman Britain: a model for itinerant craftsmen?' in Polfer, M (ed), *L'artisanat romain: évolutions, continuités et ruptures (Italie et provinces occidentales)*, Instrumentum Monograph 20. Montagnac: Éditions Monique Mergoïl, 97–109
- Crummy, N 2003 'The building materials', in Crossan, C 2003 'Excavations at St Mary Magdalen's hospital, Brook Street, Colchester'. *Essex Archaeol Hist* **34**, 121–4
- Crummy, N 2006 'Worshipping Mercury on Balcerne Hill, Colchester' in P Ottaway (ed.), *A victory celebration: papers on the archaeology of Colchester and Late Iron Age-Roman Britain presented to Philip Crummy*. Colchester: Friends of Colchester Archaeological Trust, 55–68
- Crummy, N 2007 'The salt briquetage', in Crummy, P, Benfield, S, Crummy, N, Rigby V, and Shimmin D, *Stanway: An Elite Burial Site at Camulodunum* (Britannia Monograph **24**) (London), 375–7
- Crummy, N 2008 'Cult of Isis'. *Colchester Archaeol* **21**, 21
- Crummy, N 2010 'Bears and coins: the iconography of protection in Late Roman infant burials'. *Britannia* **41**, 37–93
- Crummy, N and Hind, J 1994 'The finds', in Shimmin, D 'Excavation at Osborne Street, Colchester'. *Essex Archaeol Hist* **25**, 57–9
- Crummy, N and Hind, J 1996 'The clay tobacco pipes', in 'Excavations at Angel yard, High Street, Colchester, 1986 and 1989'. *Essex Archaeol Hist* **27**, 80–1
- Crummy, P 1971 'Insula 30'. *Trans Essex Archaeol Soc* **3**, 107–11
- Crummy, P 1974 *Colchester: Recent Excavations and Research*. Colchester: Colchester Excavation Committee
- Crummy, P 1975 *Not Only a Matter of Time*. Colchester: Colchester Excavation Committee

- Crummy, P 1976 'Portreeve's House, Colchester and a method of modernizing Essex houses in the sixteenth and seventeenth centuries'. *Post-Medieval Archaeol* **10**, 89–103
- Crummy, P 1977a 'Colchester: the Roman fortress and the development of the Colonia'. *Britannia* **8**, 65–105
- Crummy, P 1977b 'A Bronze Age cemetery at Chitts Hill, Colchester, Essex'. *Essex Archaeol Hist* **9**, 1–16
- Crummy, P 1979a 'Crop marks at Gosbecks, Colchester'. *Aerial Archaeol* **4**, 77–82
- Crummy, P 1979b 'The system of measurement used in town planning from the ninth to the thirteenth centuries', in Hawkes, S C, Brown, D and Campbell, J (eds) *Anglo-Saxon Studies in Archaeology and History 1* (BAR Brit Ser **72**). Oxford: BAR, 149–55
- Crummy, P 1980a 'The temples of Roman Colchester', in Rodwell, W (ed) *Temples, Churches and Religion: Recent Research in Roman Britain* (BAR Brit Ser **77**). Oxford: BAR, 243–83
- Crummy, P 1980b 'Camulodunum'. *Curr Archaeol* **72**, 6–10
- Crummy, P 1982a 'The origins of some major Romano-British towns'. *Britannia* **13**, 125–34
- Crummy, P 1982b 'The Roman theatre at Colchester'. *Britannia* **XIII**, 299–302
- Crummy, P 1985 'Colchester: the mechanics of laying out a town', in Grew, F and Hobley, B (eds) *Roman Urban Topography in Britain and the Western Empire* (CBA Res Rep 59). London: CBA
- Crummy, P 1987 'St John's Abbey Grounds'. *Colchester Archaeol* **1**, 5
- Crummy, P 1988a 'Colchester (Camulodunum/Colonia Victricensis)', in Webster, G (ed) *Fortress into City: The Consolidation of Roman Britain, First Century AD*. London: Batsford, 24–47
- Crummy, P 1988b 'Colchester's town wall: latest news about Britain's oldest town defences'. *Colchester Archaeol* **2**, 6–11
- Crummy, P 1988c 'The chapel on the roof'. *Colchester Archaeol* **2**, 1
- Crummy, P 1992a 'Royal graves'. *Colchester Archaeol* **5**, 1–5
- Crummy, P 1992b 'St Botolph's Priory'. *Colchester Archaeol* **5**, 6–10
- Crummy, P 1996 'Visitors Welcome! Gosbecks Archaeological Park'. *Colchester Archaeol* **9** (1995–6), 1–7
- Crummy, P 1997a 'Your move, Doctor!'. *Colchester Archaeol* **10**, 1–9
- Crummy, P 1997b 'Colchester: the Stanway burials'. *Curr Archaeol* **153**, 337–42
- Crummy, P 1998a 'Stanway 1997'. *Colchester Archaeol* **11**, 4–10
- Crummy, P 1998b *The Siege of Colchester 1648: The Archaeology of the Siege*. Colchester: Colchester Archaeological Trust
- Crummy, P 1999a 'In search of the siegeworks of 1648'. *Colchester Archaeol* **12**, 16–17
- Crummy, P 1999b 'Colchester: making towns out of fortresses and the first urban fortifications in Britain', in Hurst, H (ed) *The Coloniae of Roman Britain: New Studies and a Review* (J Roman Archaeol Suppl Ser **36**), 88–100
- Crummy, P 1999c 'Gosbecks Archaeological Park: latest discoveries'. *Colchester Archaeol* **12**, 20–1
- Crummy, P 2000 'Ancient farmstead'. *Colchester Archaeol* **13**, 4–6
- Crummy, P 2001 *City of Victory: The Story of Colchester – Britain's First Roman Town*, 2nd edn. Colchester: Colchester Archaeological Trust
- Crummy, P 2002a 'Britain's first town wall'. *Colchester Archaeol* **15**, 19–21
- Crummy, P 2002b 'The search for the town gates of Roman Colchester'. *Colchester Archaeol* **15**, 21–2

- Crummy, P 2002c 'New light on Colchester Castle'. *Colchester Archaeol* **15**, 8
- Crummy, P 2002d 'St John's Abbey explored'. *Colchester Archaeol* **15**, 23–7
- Crummy, P 2003a 'Colchester's Roman town wall', in Wilson, P (ed) *The Archaeology of Roman Towns: Studies in Honour of John S. Wacher*. Oxford: Oxbow, 44–52
- Crummy, P 2003b 'The western suburb: excavations on the site of the former Victorian workhouse at St Mary's Hospital'. *Colchester Archaeol* **16**, 10–15
- Crummy, P 2005a 'The circus at Colchester (*Colonia Victricensis*)'. *J Roman Archaeol* **18**, 267–77
- Crummy, P 2005b 'Eureka! A Roman circus!' *Colchester Archaeol* **18**, 3
- Crummy, P 2007a 'Circus update'. *Colchester Archaeol* **20**, 2–7
- Crummy, P 2007b 'The lost friary of Grey Friars'. *Colchester Archaeol* **20**, 24–5
- Crummy, P 2008a 'Drains and gates galore'. *Colchester Archaeol* **21**, 2–5
- Crummy, P 2008b 'Circus latest: eight gates – not twelve'. *Colchester Archaeol* **21**, 6–7
- Crummy, P 2008c 'It's a gas...'. *Colchester Archaeol* **21**, 34
- Crummy, P, 2008d 'The Roman Circus at Colchester', *Britannia* **39**, 15–32
- Crummy, P and Smith, N A 1977 'The preservation of the Gosbecks Site, Colchester, Essex'. *CAT Report*
- Crummy, P, Hillam, J and Crossan, C 1982 'Mersea Island: the Anglo-Saxon Causeway'. *Trans Essex Archaeol Soc* **14**, 77–86
- Crummy, P, Benfield, S, Crummy, N, Rigby, V and Shimmin, D 2007 *Stanway: An Elite Burial Site at Camulodunum* (Britannia Monogr Ser **24**). London; Society for the Promotion of Roman Studies
- Crump, B and Wallis, S 1992 'Kiddles and the Foulness fishing industry'. *Essex J* **27** (2), 38–42
- Cunliffe, B 1971 *Excavations at Fishbourne 1961–1969, Volume 1: The Site* (Rep Res Comm Soc Antiq London **XXVI**). London: Soc Antiq London
- Cunliffe, B 1987 *Hengistbury Head Dorset, Volume 1: The Prehistoric and Roman Settlement, 3500 BC–AD 500* (Oxford University Committee for Archaeology monogr **13**). Oxford
- Cunliffe, B 1991 *Iron Age Communities in Britain*, 3rd edn. London: Routledge
- Cunliffe, B 2010 *Iron Age Communities in Britain*, 4th edn. London: Routledge
- Cunliffe, B and Davenport, P 1985 *The Temple of Sulis Minerva at Bath, Volume 1 (1) The Site* (Oxford University Committee for Archaeology monogr **7**). Oxford
- Cunningham, C M 1982 'Medieval and post-medieval pottery', in Drury, P J 'Aspects of the origins and development of Colchester Castle'. *Archaeol J* **139**, 358–80
- Cunningham, C M 1985 'A typology for post-Roman pottery in Essex', in Cunningham C M and Drury, P J *Post-Medieval Sites and their Pottery: Moulsham Street, Chelmsford* (Chelmsford Archaeol Trust Rep **5**, CBA Res Rep **54**). London, 1–16
- Cutts, E L 1853 *Colchester Castle Not A Roman Temple*. London
- Cutts, E L 1889 *Historic Towns: Colchester*, 2nd edn. London: Longmans, Green & Co
- Dalton, W H 1880 *The Geology of the Neighbourhood of Colchester* (48 S.W.) (Memoirs of the Geological Survey. England and Wales). London: HMSO
- Dannell, G B 1971 'The samian pottery', in Cunliffe, B *Excavations at Fishbourne 1961–1969, Volume 2: The Finds* (Rep Res Comm Soc Antiq London **XXVI**). London: Soc Antiq London, 260–316
- Darby, H C 1957 *The Domesday Geography of Eastern England*. Cambridge: Cambridge University Press
- Darby, H C 1977 *Domesday England*. Cambridge: Cambridge University Press
- Dark, K 1992 *Civitas to Kingdom: British Political Continuity 300–800* (Studies in the early

- history of Britain). Leicester: Leicester University Press
- Davey, P and Hodges, R 1993 'Ceramics and trade: a critique of the archaeological evidence', in Davey, P and Hodges, R (eds) 1983 *Ceramics and Trade: The Production and Distribution of Later Medieval Pottery in North-West Europe*. Sheffield: Univ Sheffield Dept Archaeol & Prehist, 1–14
- Davies, B J, Richardson, B and Tomber, R S 1994 *A Dated Corpus of Early Roman Pottery from the City of London* (CBA Res Rep **98** and The Archaeology of Roman London **5**). York: CBA
- Davies, D G 1968 'A palstave and amber bead from Colchester, Essex'. *Antiq J* **48**, 1–5
- Davies, G M R in archive Archive report on excavation at 45–6 High Street, Colchester by Colchester Archaeological Group
- Davies, J A 1996a 'Where eagles dare: the Iron Age of Norfolk'. *Proc Prehist Soc* **62**, 63–92
- Davies, J A 1996b 'The coins', in Shimmin, D and Carter, G 'Excavations at Angel Yard, High Street, Colchester, 1986 and 1989'. *Essex Archaeol Hist* **27**, 64–6
- Davies, R W 1971 'The Roman military diet'. *Britannia* **2**, 122–42
- Davis, J R 1981 'Colchester 1600–62: politics, religion and officeholding in an English provincial town'. Unpublished PhD thesis, Brandeis Univ
- Deanesly, M 1961 'The pre-Conquest Church in England', in Dickinson, J C (ed) *An Ecclesiastical History of England*, vol 1. London: A & C Black
- De Jersey, P and Newman, J 2001 'A hoard of Iron Age coins from near Woodbridge, Suffolk'. *Brit Numis J* **70**, 139–41
- Denison, S 2001 'A tale of two potters, a burnt house and a cemetery'. *Brit Archaeol* **58**, 7
- Detsicas, A P 1977 'Excavations at Eccles, 1976: final interim report'. *Archaeol Cantiana* **xciii** (1978), 55–9
- Dickinson, T H 1976 'The Anglo-Saxon burial sites of the Upper Thames Region, and their bearing on the history of Wessex, circa AD 400–700'. Unpublished DPhil thesis, Univ Oxford
- Dimbleby, G W 1978 'A pollen analysis from Verulamium (St Michael's 1966)'. *Hertfordshire Archaeol* **6** (1979), 112–15
- DNB 2004 *The Dictionary of National Biography*. Oxford: OUP
- Dobney, K, Hall, A and Kenward, H 1999 'It's all garbage... a review of bioarchaeology in the four English *colonia* towns', in Hurst, H R (ed) *The Coloniae of Roman Britain: New Studies and a Review* (J Roman Archaeol Supp Ser **36**), 15–35
- Dodgson, J M 1991 'The site of the Battle of Maldon', in Scragg, D (ed) *The Battle of Maldon A.D. 991*. Oxford: Basil Blackwell in association with the Manchester Centre for Anglo-Saxon Studies, 170–9
- DoE 1971 *List of Buildings of Special Architectural or Historic Interest: Colchester Borough*. Department of the Environment
- Doolittle, I G 1972 'The plague in Colchester 1579–1666'. *Trans Essex Archaeol Soc* **4**, 134–45
- Douet, J 1998 *British Barracks 1600 – 1914*. London: English Heritage
- Down, A and Rule, M 1971 *Chichester Excavations I*. Chichester: Chichester Civic Society Excavations Committee
- Driel-Murray, C van 2001 'Technology transfer: the introduction and loss of tanning technology during the Roman period' in M. Polfer (ed.) *L'artisanat romain: évolutions, continuités et ruptures (Italie et provinces occidentales)* (Instrumentum Monogr **20**). Montagnac: Éditions Monique Mergoïl, 55–67
- Drummond-Murray, J, Thompson, P and Cowan, C 2002 *Settlement in Roman Southwark:*

- archaeological excavations (1991–8) for the London Underground Limited Jubilee Line Extension Project (MoLAS Monogr 12). London: Museum of London Archaeology Service
- Drury, P J 1975 'Roman Chelmsford – Caesaromagus', in Rodwell, W and Rowley, T (eds) *The 'Small Towns' of Roman Britain* (BAR Brit Ser 15), Oxford: BAR, 159–73
- Drury, P J 1978 *Excavations at Little Waltham 1970–71* (Chelmsford Excavation Committee Report 1/CBA Res Rep 26). London: CBA
- Drury, P J 1982 'Aspects of the origins and development of Colchester Castle'. *Archaeol J* 139, 302–419
- Drury, P J 1984 'The Temple of Claudius at Colchester reconsidered'. *Britannia* 15, 7–50
- Drury, P J and Hull, M R 1982 'The forebuildings and barbacan'. *Archaeol J* 139, 315–17
- Drury, P J and Petchey, M R 1976 'Medieval potteries at Mile End and Great Horkesley, near Colchester'. *Trans Essex Archaeol Soc* 7 (1975), 33–60
- Drury, P J and Rodwell, R 1980 'Settlement in the later Iron Age and Roman periods', in Buckley, D G (ed) *Archaeology in Essex to AD 1500* (CBA Res Rep 34). London: CBA, 59–75
- Drury, P J and Wickenden, N P 1982 'An early Saxon settlement within the Romano-British small town at Heybridge, Essex'. *Medieval Archaeol* 26, 1–40
- Duby, G 1969 *Medieval Agriculture 900–1500*. London: Collins
- Dudley, D R and Webster, G 1965 *The Roman Conquest of Britain*. London: Batsford
- Duncan, P M 1858a 'The history and description of the walls of Colchester'. *Trans Essex Archaeol Soc* 1, 26–58
- Duncan, P M 1858b 'The Roman cloaca at Colchester; its discovery and description'. *Trans Essex Archaeol Soc* 1, 210–28
- Dunnett, B R K 1966 'First century Colchester in the light of recent research'. *Trans Essex Archaeol Soc* 2, 137–42
- Dunnett, B R K 1967 'Excavations on North Hill, Colchester'. *Archaeol J* CXXIII (for 1966), 27–61
- Dunnett, R 1971a 'Excavations in Colchester, 1964–68'. *Trans Essex Archaeol Soc* 3, 1–106
- Dunnett, R 1971b 'The excavation of the Roman theatre at Gosbecks'. *Britannia* 2, 27–47
- Dunnett, R 1975 *The Trinovantes*. London: Duckworth
- Dunning, G C 1962 'Saxon and Norman pottery from Colchester Castle Park'. *Antiq J* XLII, 62–7
- Dunning, G C 1977 'Mortars', in Clarke, E and Carter, A *Excavations in King's Lynn 1963–70* (Soc Med Archaeol Monogr 7), 320–47
- Dyer, C 1989 *Standards of Living in the Later Middle Ages: Social Change in England c. 1200–1520*. Cambridge: Cambridge University Press
- Eckardt, H 1999 'The Colchester "Child's Grave"'. *Britannia* XXX, 57–90
- Eckardt, H 2002a 'Lamp production at West Stockwell Street, Colchester'. *Britannia* XXXIII, 77–93
- Eckardt, H 2002b *Illuminating Roman Britain*. Monographies Instrumentum 23
- Eckardt, H 2007 'Contexts in Colchester' in R Hingley and S Willis (eds), *Roman finds: context and theory*. Oxford: Oxbow Books, 142–9
- Eckardt, H and Crummy, N 2008 *Styling the body in Late Iron Age and Roman Britain: a contextual approach to toilet instruments*, Instrumentum Monograph 36. Montagnac: Éditions Monique Mergoïl
- Eddy, M 1982 *Kelvedon: the origins and development of a Roman small town*, Essex County Council Occasional Paper 3. Chelmsford: Essex County Council

- Eddy, M 1995 'Kelvedon and the fort myth in the development of Roman small towns in Essex', in Brown, A E (ed) *Roman Small Towns in Eastern England and Beyond* (Oxbow Monogr 52). Oxford: Oxbow, 119–28
- Eddy, M R and Ryan, P M 1983 'John Ennows: a previously unknown clay-pipe maker of All Saints, Colchester'. *Essex Archaeol Hist* 15, 106–12
- Eddy, M R and Turner, C 1982 *Kelvedon: The Origins and Development of a Roman Small Town* (Essex County Council Occasional Paper 3). Chelmsford: Essex County Council
- Edwards, B J N 1959 'Excavation at Great Bromley: January 1960'. *Colchester Archaeol Group Annu Bull* 2, 42–3
- Egan, G 1994 *Lead Cloth Seals and Related Items in the British Museum* (British Museum Occasional Paper 93). London: British Museum
- Egan, G and Pritchard, F 1991 *Dress accessories* (Medieval Finds from London 3). London: HMSO
- Ellison, R A and Lake, R D 1986 *Geology of the Country around Braintree: Memoir for 1:50 000 geological sheet 223 (England and Wales)*. London, HMSO
- Erith, F H 1959 'Circular crop-marks in the Ardleigh District'. *Colchester Archaeol Group Annu Bull* 2, 31–4
- Erith, F H 1960a 'A Late Bronze Age barrow at Vinces Farm, Ardleigh'. *Colchester Archaeol Group Annu Bull* 3, 22–4
- Erith, F H 1960b 'Ardleigh – Ring Two (Contd.)'. *Colchester Archaeol Group Annu Bull* 3, 37–41
- Erith, F H 1960c 'Ardleigh – Ring One. 1960. The excavation of the second late Bronze Age barrow at Vinces Farm'. *Colchester Archaeol Group Annu Bull* 3, 51–5
- Erith, F H 1962a 'Ardleigh Ring Six'. *Colchester Archaeol Group Annu Bull* 5, 107–9
- Erith, F H 1962b 'A Bronze Age barrow at Newhouse Farm, Great Bromley'. *Colchester Archaeol Group Annu Bull* 5, 120–1
- Erith, F H 1963 'Excavation of a ring-ditch at Martells Hall, Ardleigh'. *Colchester Archaeol Group Annu Bull* 6, 40–4
- Erith, F H 1966 'Ardleigh Ring Four'. *Colchester Archaeol Group Annu Bull* 9, 2–4
- Erith, F H 1972 'Ardleigh Ring Eight'. *Colchester Archaeol Group Annu Bull* 15, 15
- Erith, F H 1975 'Ardleigh Ring Five'. *Colchester Archaeol Group Annu Bull* 18, 2–4
- Erith, F H and Holbert, P R 1970 'The Iron Age "A" Farmstead at Vinces Farm, Ardleigh'. *Colchester Archaeol Group Annu Bull* 13, 1–26
- Erith, F H and Longworth, I H 1960 'A Bronze Age urnfield on Vinces Farm Ardleigh, Essex'. *Proc Prehist Soc* 26, 178–92
- Esmonde Cleary, A S 1985 'The quick and the dead: suburbs, cemeteries and the town', in Grew, F and Hobley, B (eds) *Roman Urban Topography in Britain and the Western Empire* (CBA Res Rep 59). London: CBA, 74–7
- Esmonde Cleary, A S 1987 *Extra-Mural Areas of Romano-British Towns* (BAR Brit Ser 169). Oxford: BAR
- Esmonde Cleary, A S 1989 *The Ending of Roman Britain*. London: Batsford
- Farrands, R H 1975 'Evidence for a Roman road linking Mistley with Colchester'. *Colchester Archaeol Group Annu Bull* 18, 5–7
- Faulkner, N 1994 'Later Roman Colchester'. *Oxford J Archaeol* 13, 93–120
- Faulkner, N 2000 *The Decline and Fall of Roman Britain*. Stroud: Tempus
- Faulkner, P A 1966 'Medieval undercrofts and town houses'. *Archaeol J* CXXIII, 120–35
- Fawn, J 1983 'Roman tile kiln site at Lexden Lodge Farm'. *Colchester Archaeol Group Annu Bull* 26, 36

- Fawn, J 1993 'Two sections across a supposed Roman Road, Stanway, Colchester'. *Colchester Archaeol Group Annu Bull* **36**, 7–16
- Fawn, J 1997 'Longinus – a remarkable discovery'. *Essex J* **32**, 8
- Fawn, J 2002 "'W" is for ... the bell-maker's mark'. *Colchester Archaeol* **15**, 28–9
- Fawn, J, Evans, K A, McMaster, I and Davies, G M R 1990 *The Red Hills of Essex: Salt-Making in Antiquity*. Colchester: Colchester Archaeological Group
- Ferdière, A and Villard, A 1993 'La tombe augustéenne de Flère-la-Rivière (Indre) et les sépultures aristocratiques de la cité des Bituriges'. *Mémoire 2 du Musée d'Arenthomagus 7e supplément à Revue Archéologique du Centre de la France, Saint Marcel*
- Finn, R W 1971 *The Norman Conquest and its Effects on the Economy, 1066–86*. London: Longman
- Fishwick, D 1972 'Templum Divo Claudio Constitutum'. *Britannia* **III**, 164–81
- Fishwick, D 1973 'Tacitean usage and the temple of *divus Claudius*'. *Britannia* **IV**, 264–5
- Fishwick, D 1987 *The Imperial Cult in the Latin West: Studies in the Ruler Cult of the Western Provinces of the Roman Empire* (Études Préliminaires aux Religions Orientales dans l'Empire Romain 108). Leiden: E J Brill
- Fishwick, D 1991 'Seneca and the temple of Divus Claudius'. *Britannia* **22**, 137–41
- Fishwick, D 1995 'The temple of Divus Claudius at *Camulodunum*'. *Britannia* **XXVI**, 11–27
- Fishwick, D 1997 'The provincial centre at Camulodunum: towards an historical context'. *Britannia* **XXVIII**, 31–50
- Fitzpatrick, A 1986 'Camulodunum and the early occupation of south-east England: some reconsiderations', in Planck, D and Unz, C (eds) *Kongress-Akten der Beiträge am Limes-Kongress in Aalen 1983*. Stuttgart, 35–41
- Foster, J 1986 *The Lexden Tumulus, A Re-appraisal of an Iron Age Burial from Colchester, Essex* (BAR Brit Ser **156**). Oxford: BAR
- Frere, S 1972 *Verulamium Excavations Vol 1* (Rep Res Comm Soc Antiq London **XXVIII**). London: Soc Antiq London
- Frere, S 1987 *Britannia: A History of Roman Britain*, 3rd edn. London: Routledge & Kegan Paul
- Fryer, V and Murphy, P 1996 'Charred plant macrofossils and other material from Colchester, Gosbecks Site B (GOSB 95/16): an assessment'. Unpublished CAT archive report
- Fulford, M 1989 'The economy of Roman Britain', in Todd, M (ed) *Research on Roman Britain 1960–89* (Britannia Monogr Ser **11**). London: Society for the Promotion of Roman Studies, 175–201
- Fulford, M 2004 'Economic structures' in M Todd (ed), *A companion to Roman Britain*. Oxford: Blackwell Publishing, 309–26
- Fulford, M and Timby, J 2000 *Late Iron Age and Roman Silchester: Excavations on the Site of the Forum-Basilica 1977, 1980–86* (Britannia Monogr Ser **15**). London: Society for the Promotion of Roman Studies
- Fulford, M, Clarke, A and Eckhardt, H 2006 *Life and Labour in Late Roman Silchester* Britannia Monograph **22**
- Fulford, M 2008 'Imperiium Galliarum, Imperium Britanniarum. Developing New Ideologies and Settling old scores: abandonments, demolition and new building in south-east Britain, c. AD 250–300', in Clark, J, Cotton, J, Hall, J, Sherris, R and Swain, H (eds.) *Londinium and Beyond* (CBA Research Report **156**). York: CBA, 41–5.
- Gaimster, D R M 1988 'Post-medieval ceramic stove tiles bearing the royal arms: evidence for their manufacture and use in southern Britain'. *Archaeol J* **145**, 314–43

- Gant, L H 1951 'Excavations at Culver Street, Colchester 1949–50'. *Essex Review* **LX** (239), 124–6
- Gant, L H 1958 'Clay pipes found at Colchester'. *Colchester Archaeol Group Annu Bull* **1**, 31–3
- Gant, L H 1960a 'Medieval altar at St James's Church'. *Colchester Archaeol Group Annu Bull* **3**, 47
- Gant, L H 1960b 'The Joslin/Tesco site in Colchester'. *Colchester Archaeol Group Annu Bull* **3**, 43–4
- Gant, L H 1963 'Monkwick Farmhouse, Berechurch'. *Colchester Archaeol Group Annu Bull* **6**, 27
- Gant, L H 1972 'Berechurch'. *Colchester Civic Soc Quarterly Bull* **3.3**, 33–5
- Gardiner, M 1997 'The exploitation of sea-mammals in medieval England: bones and their social context'. *Archaeol J* **154**, 173–95
- Gerloff, S 1986 'Bronze Age class A cauldrons: typology, origins and chronology'. *J Roy Soc Antiq Ir* **116**, 84–115
- Germany, M 2003 *Excavations at Great Holt Farm, Boreham, Essex, 1992–3* (E Anglian Archaeol **105**). Chelmsford: Essex County Council
- Gerrard, C 2003 *Medieval Archaeology: Understanding Traditions and Contemporary Approaches*. London: Routledge
- Gervers, M 1989 'The textile industry in Essex in the late twelfth and thirteenth centuries : a study based on occupational names in charter sources'. *Essex Archaeol Hist* **20**, 34–73
- Gillam, J P 1961 'The coarse pottery', in Steer, K A 'Excavations at Mumrills Roman Fort 1958–60'. *Proc Soc Antiq Scotl* **94**, 113–32
- Glazebrook, J (ed) 1997 *Research and Archaeology: A Framework for the Eastern Counties 1. Resource Assessment* (E Anglian Archaeol Occas Pap **3**). Norwich: Scole Archaeological Committee
- Going, C J 1996 'The Roman countryside', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 95–107
- Going, C J 1997 'Roman', in Glazebrook, J (ed) *Research and Archaeology: A Framework for the Eastern Counties, 1. Resource Assessment* (E Anglian Archaeol Occas Pap **3**). Norwich: Scole Archaeological Committee, 35–46
- Going, C J and Belton, J 1999 'Roman Pottery' in Brown, N *The Archaeology of Ardleigh, Essex: Excavations 1955–1980* (E Anglian Archaeol Rep **90**). Chelmsford: Essex County Council
- Gonzenbach von, V 1995 *Die Römischen Terracotten in der Schweiz, Untersuchungen zu Zeitstellung, Typologie und Ursprung der mittelgallischen Tonstatuetten* (Band A). Bern
- Goodburn, R 1989 'British coins', in Stead, I M and Rigby, V *Verulamium: The King Harry Lane Site* (Engl Heritage Archaeol Rep **12**). London: English Heritage, 87
- Gould, I C 1895 *The Site of Camulodunum, or Colchester versus Chesterford*. London: Marlborough
- Grant, A 2000 'Biological and environmental analyses', in Fulford, M and Timby, J *Late Iron Age and Roman Silchester: Excavations on the Site of the Forum-Basilica 1977, 1980–86* (Britannia Monogr Ser **15**). London: Society for the Promotion of Roman Studies, 425–82
- Green, M J 1976 *A Corpus of Religious Material from the Civilian Areas of Roman Britain* (BAR Brit Ser **24**). Oxford: BAR
- Green, S and Walker, E 1991 *Ice Age Hunters: Neanderthals and Early Modern Hunters in Wales*. Cardiff: Nat Mus Wales

- Grew, F and de Neergaard, M 1988 *Shoes and pattens* (Medieval Finds from London 2). London: HMSO
- Grueber, H A 1903 'A find of silver coins at Colchester'. *Numis Chron* 4th series **3**, 111–76
- Hall, A F 1944 'A Roman walled cemetery at Colchester'. *Archaeol J* **101**, 68–90
- Hall, A F 1958 'The old castle'. *Colchester Archaeol Group Annu Bull* **1**, 39–41
- Hamerow, H F 1987 'Anglo-Saxon settlement pottery and spatial development at Mucking, Essex'. *Berichten ROB* (Amersfoort) **37**, 245–73
- Hamerow, H F 1991 'Settlement mobility and the "Middle Saxon Shift": rural settlements and settlement patterns in Anglo-Saxon England'. *Anglo-Saxon Engl* **20**, 1–17
- Harden, D B 1947 'The glass', in Hawkes, C F C and Hull, M R 1947 *Camulodunum – First Report on the Excavations at Colchester 1930–1939* (Rep Res Comm Soc Antiq London **XIV**). London: Soc Antiq London, 287–307
- Harden, D B 1969 'Ancient glass, II: Roman'. *Archaeol J* **CXXVI** (1969) 44–77
- Harley, L S 1955 'Merchants' marks in Essex'. *Essex Review* **LXIV** (254), 142–3
- Harris Sacks, D and Lynch, M 2000 'Ports 1540–1700', in Clarke, P (ed) *Cambridge Urban History of Britain ii 1540–1840*. Cambridge: Cambridge University Press
- Hart, C R 1971 *The Early Charters of Essex*. Leicester: Leicester University Press
- Hart, C R 1980 'The Mersea charter of Edward the Confessor'. *Essex Archaeol Hist* **12**, 94–102
- Hart, C R 1987 'The ealdordom of Essex', in Neal, K (ed) *An Essex Tribute*. London: Leopard's Head Press, 57–84
- Hart, C R 1993 'Essex in the late tenth century', in Cooper, J (ed) *The Battle of Maldon: Fiction and Fact*. London: Hambledon Press, 171–204
- Hartley, K F 1973 'The marketing and distribution of mortaria', in Detsicas, A (ed) *Current Research in Romano-British Coarse Pottery: Papers given at a CBA Conference held at New College, Oxford, March 24 to 26, 1972* (CBA Res Rep **10**). London: CBA, 35–91
- Hartley, K F 1977 'Two minor potteries producing mortaria in the first century AD', in Dore, J and Green, K (eds) *Roman Pottery Studies in Britain and Beyond* (BAR Supp Ser **30**). Oxford: BAR, 5–17
- Haselgrove, C 1982 'Wealth, prestige and power: the dynamics of Late Iron Age political centralisation in south-east England' in Renfrew, C and Shennan, S (eds) *Ranking, resource and exchange*. Cambridge: Cambridge University Press, 79–88
- Haselgrove, C 1987a *Iron Age Coinage in South-East England: The Archaeological Context* (BAR Brit Ser **174**). Oxford: BAR
- Haselgrove, C 1987b 'The archaeological context of Iron Age coin finds on major settlement sites in eastern England: Colchester and St Albans', in Bousquet, J and Naster, P (eds) *Mélanges Offerts au Docteur J-B Colbert de Beaulieu*. Paris: Léopard d'Or, 483–96
- Haselgrove, C 1989 'The later Iron Age in southern Britain and beyond', in Todd, M (ed) *Research on Roman Britain 1960–89* (Britannia Monogr Ser **11**). London: Society for the Promotion of Roman Studies, 1–18
- Haselgrove, C (ed) forthcoming *Cartimandua's capital? Research and excavations at and around the Late Iron Age royal site at Stanwick, North Yorkshire, 1981–2004* (working title), CBA Research Report nn. York: Council for British Archaeology
- Hassall, M 1979 'The impact of Mediterranean urbanism on indigenous nucleated centres', in Burnham, B C and Johnson, H B (eds) *Invasion and Response: The Case of Roman Britain* (BAR Brit Ser **73**). Oxford: BAR, 241–54
- Hassall, M 1996 'London as a provincial capital', in Bird, J, Hassall, M and Sheldon, H

- (ed) *Interpreting Roman London – Papers in Memory of Hugh Chapman* (Oxbow Monogr 58). Oxford: Oxbow, 19–26
- Hassall, M 2000 'Pre-Hadrianic legionary dispositions in Britain', in Brewer R J (ed) *Roman Fortresses and their Legions*. London: Soc Antiq; Cardiff: Nat Mus Galleries Wales, 51–67
- Hattatt, R 1987 *Brooches of Antiquity*. Oxford: Oxbow Books
- Havis, R and Brooks, H 2004a *Excavations at Stansted Airport, 1986–91, Vol 1*, East Anglian Archaeology 107. Essex County Council
- Havis, R and Brooks, H 2004b *Excavations at Stansted Airport, 1986–91 Vol II*, East Anglian Archaeology 107. Essex County Council
- Hawkes, C F C 1932 'The Colchester excavations'. *Antiq J* 12, 74–6
- Hawkes, C F C and Hull, M R 1947 *Camulodunum – First Report on the Excavations at Colchester 1930–1939* (Rep Res Comm Soc Antiq London XIV). London: Soc Antiq London
- Hawkes, C F C and Smith, M A 1957 'On some buckets and cauldrons of the Bronze and early Iron Ages'. *Antiq J* 37, 131–98
- Hay, E W A 1821 *Letter ... upon the recent Discovery... of a Beautiful Monument of Roman Sculpture representing the Theban Sphinx*. Colchester: Swinborne and Walter
- Hayward, K M J 2009 *Roman quarrying and stone supply on the periphery – Southern England; a geological study of first-century funerary monuments and monumental architecture* (BAR Brit Ser 500). Oxford: BAR
- Heard, N 1970 *Wool: East Anglia's Golden Fleece*. Lavenham: Dalton
- Hebditch, M 1971 'Excavations on the south side of the temple precinct at Colchester, 1964'. *Trans Essex Archaeol Soc* 3, 115–30
- Hedges, J D 1982 'Fields Farm, Layer de la Haye', in Priddy, D (ed) 'Work of the Essex County Council Archaeological Section, 1981'. *Essex Archaeol Hist* 14, 111–32
- Henig, M 1978 *A Corpus of Roman Engraved Gemstones from British Sites* (BAR Brit Ser 8, 2nd edn, 2 vols). Oxford: BAR
- Herne, A 1988 'A time and a place for the Grimston Bowl', in Barrett, J C and Kinnes, I A (eds) *The Archaeology of Context in the Neolithic and Bronze Age: Recent Trends*. Sheffield: Univ Sheffield Dept Archaeol & Prehist, 9–29
- Hewett, C A 1980 'The implications of pre-Conquest carpentry in Essex', in Buckley, D G (ed) *Archaeology in Essex to AD 1500* (CBA Res Rep 34). London: CBA, 108–12
- Hills, C 1999 'Early historic Britain', in Hunter, J and Ralston, I (eds) *The Archaeology of Britain: An Introduction from the Upper Palaeolithic to the Industrial Revolution*. London: Routledge, 176–93
- Hinchliffe, J 1981 'The Ardleigh Project: a summary'. *Colchester Archaeol Group Annu Bull* 24, 2–5
- Hinchliffe, J 1986 *Preservation by Record: The Work of the Central Excavation Unit 1975–85*. London: English Heritage
- Hingley, R 1990 'Iron Age "currency bars": The archaeological and social context'. *Archaeol J* 147, 91–117
- Hingley, R 2007 'The currency bars', in Crummy, P, Benfield, S, Crummy, N, Rigby, V and Shimmin, D 2007 *Stanway: An Elite Burial Site at Camulodunum* (Britannia Monogr Ser 24). London: Society for the Promotion of Roman Studies, 33–6
- Hobbs, R 1996 *British Iron Age coins in the British Museum*. London: British Museum Press
- Hodges, R 1989 *The Anglo-Saxon Achievement: Archaeology and the Beginnings of English Society*. London: Duckworth

- Holbert, P R 1965 'The excavation of a section of the town ditch Colchester and the rediscovery and excavation of Bastion No.3'. *Colchester Archaeol Group Annu Bull* **8**, 44–9
- Holbert, P R 1966 'Preliminary report on the excavations in the garden of St Mary's Rectory, Colchester, 1965'. *Colchester Archaeol Group Annu Bull* **9**, 14–24
- Holbert, P R 1971 'Excavation of Roman tile kilns at Moat Farm, Lexden, Colchester 1969–70'. *Colchester Archaeol Group Annu Bull* **14**, 22–34
- Holbert, P R 1972 'A Romano-British tile kiln at Mount Bures, Essex'. *Colchester Archaeol Group Annu Bull* **15**, 19–22
- Holgate, R 1996 'Essex c. 4000–1500 BC', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 15–25
- Holloway, B 2006 'Sixth form college: bath-house or shrine?'. *Colchester Archaeol* **19**, 14–17
- Hope, J H 1984 'Excavations at All Saints Church, Cressing, Essex, 1979', in Turner, R and Priddy, D (eds) *Four Church Excavations in Essex* (Essex County Council Occasional Paper **4**). Chelmsford: Essex County Council, 28–42
- Hopkins, K 1978 *Conquerors and Slaves* (Sociological Studies in Roman History **1**). Cambridge: Cambridge University Press
- Horsley, K and Wallace, C R 1998 'The late Iron Age and Roman pottery', in Wallis, S and Waughman, M *Archaeology and the Landscape in the Lower Blackwater Valley* (E Anglian Archaeol Rep **82**). Chelmsford: Essex County Council, 142–57
- Huggins, P J and Bascombe, K N 1992 'Excavations at Waltham Abbey, Essex, 1985–91: three pre-Conquest churches and Norman evidence'. *Archaeol J* **149**, 282–343
- Hull, M R 1929 'A Roman pottery shop in Colchester'. *Trans Essex Arch Soc* **XIX(iv)**, 277–87
- Hull, M R 1942 'An early Claudian burial found at Colchester'. *Antiq J* **XXII**, 59–65
- Hull, M R 1955 'The south wing of the Roman "forum" at Colchester: recent discoveries'. *Trans Essex Archaeol Soc* **XXV(i)**, 24–61
- Hull, M R 1956 Unpublished note in Colchester Museums (M R Hull Archive)
- Hull, M R 1957 Unpublished note in Colchester Museums (M R Hull Archive)
- Hull, M R 1958 *Roman Colchester* (Rep Res Comm Soc Antiq London **XX**). London: Soc Antiq London
- Hull, M R 1960 'The St Nicholas Church Site, Colchester'. *Trans Essex Archaeol Soc* **XXV(iii)**, 301–28
- Hull, M R 1963 *The Roman Potters' Kilns of Colchester* (Rep Res Comm Soc Antiq London **XXI**). London: Soc Antiq London
- Hull, M R nd a Unpublished note in Girling Collection (Colchester Museums, M R Hull Archive)
- Hull, M R nd b 'Inventory of grave groups'. Unpublished (Colchester Museums, M R Hull Archive)
- Hull, M R nd c 'Corpus of ancient and Roman brooches'. Unpublished (Colchester Museums, M R Hull Archive)
- Hull, M R and Hawkes, C F C 1987 *Corpus of Ancient Brooches in Britain by the late Mark Reginald Hull: Pre-Roman Bow Brooches* (BAR Brit Ser **168**). Oxford: BAR
- Hunter, J 1999 *The Essex Landscape: A Study of its Form and History*. Chelmsford: Essex Record Office
- Hurst, H 1985 *Kingsholm: excavations at Kingsholm Close and other sites with a discussion of the archaeology of the area* (Gloucester Archaeol Rep **1**), Cambridge: Gloucester Archaeological Publications
- Hurst, H 1999 'Topography and identity in *Glevum colonia*', in Hurst, H (ed) *The Coloniae of*

- Roman Britain: New Studies and a Review* (J Roman Archaeol Supp Ser 36), 113–35
- Huskinson, J 1994 *Corpus Signorum Imperii Romani, Vol 1. Fasc.8, Roman Sculpture from Eastern England*. Oxford: Oxford Univ. Press
- Hutchinson, V J 1986 *Bacchus in Roman Britain: The Evidence for his Cult* (BAR Brit Ser 151). Oxford: BAR
- Hutton, R and Reeves, W 1998 'Sieges and fortifications', in Kenyon, J and Ohlmeyer, J (eds) *The Civil Wars: A Military History of England, Scotland, and Ireland 1638–1660*. Oxford: Oxford University Press, 195–233
- Impey, E and Parnell, G 2000 *The Tower of London: The Official Illustrated History*. London: Merrell in association with Historic Royal Palaces
- Irby-Massie, G L 1999 *Military Religion in Roman Britain*. Brill, Netherlands
- Jackson, R P J 1997 'An ancient British medical kit from Stanway, Essex'. *The Lancet* 350, 1471–3
- Jacobi, R M 1996 'The late Upper Palaeolithic and Mesolithic in Essex', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 10–14
- Jarman, A M 1913 'Siege relics (1648) found at Colchester'. *Trans Essex Archaeol Soc* XII, 256–7
- Jarman, A M 1915 'The Colchester town ditch'. *Trans Essex Archaeol Soc* XIII, 107–12
- Jeayes, I H 1921 *Court Rolls of the Borough of Colchester vol 1 (1310–1352)*. Colchester: Colchester Borough Council
- Jenkins, H 1851 'Colchester Castle'. *J Brit Archaeol Ass* VI, 451
- Jenkins, H 1842 'Observations on the site of Camulodunum'. *Archaeologia* 29, 243–56
- Jenkins, H 1853 *An Appendix to the Lecture on Colchester Castle*. London: Painter
- Jenkins, H 1869 *Colchester Castle Shewn to have been the Templ'd Citadel*. London: Smith
- Jessup, R F 1959 'Barrows and walled cemeteries in Roman Britain'. *J Brit Archaeol Ass* 22, 1–32
- Johnson, A 1983 *Roman Forts*. London: A & C Black
- Jones, B and Mattingly, D 1990 *An Atlas of Roman Britain*. Oxford: Blackwell
- Jones, G D B 1978 'The Colchester and Ipswich aerial survey'. *Aerial Archaeol* 1 (1977), 23–5
- Jones, M J 1999 'Roman Lincoln: changing perspectives', in Hurst, H (ed) *The Coloniae of Roman Britain: New Studies and a Review* (J Roman Archaeol Supp Ser 36) 101–12
- Jones, M J, Stocker, D A and Vince, A G 2003 *The City by the Pool: Assessing the Archaeology of the City of Lincoln* (Lincoln Archaeol Stud 10). Oxford: Oxbow
- Jones, M U 1974 'Excavations at Mucking, Essex. A second interim report'. *Antiq J* 54(2), 183–99
- Judson, E 1987 *The Lives and Wills of Essex Token Issuers*. Private publication
- Kemble, J M 1839 *Codex diplomaticus aevi saxonici*. London: Sumptibus Societatis
- King, E 1779 'Roman antiquities discovered in Essex'. *Archaeologia* V, 229–31
- Kirk, R E G 1910 *Feet of fines for Essex 1*. Colchester: Essex Archaeol Soc
- Kretz, R 2000 'The early gold staters of Tasciovanus – a postscript'. *Spink Numis Circ* CVIII (2), 49
- Lambot, B, Friboulet, M, Méniel, P, Delestrée, L-P, Guillot, H and Le Goff, I 1994 *Le Site protohistorique d'Acy-Romance, Ardennes. II, Les Nécropoles dans leur contexte régional, Thugny-Trugny et tombes aristocratiques, 1986–1988–1989* (Mémoire de la Société archéologique champenoise 8). Reims: Société archéologique champenoise
- Lane, T and Morris, E (eds) 2001 *A millennium of salt-making: prehistoric and Romano-*

- British salt-making in the Fenland* (Lincolnshire Archaeol Heritage Rep 4). Heckington: Heritage Lincolnshire
- Laver, H 1889a 'Roman roads near to and those radiating from Colchester'. *Trans Essex Archaeol Soc* **III**, 123–35
- Laver, H 1889b 'Roman Leaden Coffins Discovered at Colchester'. *Trans Essex Archaeol Soc* **III**, 273–7
- Laver, H 1906 'Roman remains discovered in making the public park at Colchester Castle'. *Trans Essex Archaeol Soc* **IX**, 122–5
- Laver, H 1909 'Mosaic pavements in Colchester'. *Trans Essex Archaeol Soc* **X**, 84–90
- Laver, H and Reader, F W 1913 'The excavation of Lexden Mount'. *Trans Essex Archaeol Soc* **XII** (1912), 186–92
- Laver, P G 1923 'Archaeological notes: Beryfield'. *Essex Archaeol Hist* **23** (pt 1), 118–21
- Laver, P G 1926 'Some recent finds: Colchester, Fingringhoe and West Mersea'. *Trans Essex Archaeol Soc* **XVII**, 270–1
- Laver, P G 1927 'The excavation of a tumulus at Lexden, Colchester'. *Archaeologia* **76**, 241–54
- Laver, P G nd a 'Diary' (Colchester Museums, P G Laver Archive)
- Laver, P G nd b Unpublished notes on Copford Hall (Colchester Museums, P G Laver Archive)
- Lawson, A K 1986 'A fragment of life-size bronze equine statuary from Ashill, Norfolk'. *Britannia* **17**, 333–9
- Lewis M J T 1966 *Temples in Roman Britain*. Cambridge: Cambridge University Press
- Lindgren, C 1978 *Classical Art Forms and Celtic Mutations: Figural Art in Roman Britain*. New Jersey: Noyes Press
- Ling, R 1997 'Mosaics in Roman Britain: discoveries and research since 1945'. *Britannia* **28**, 259–95
- Lingwood, L 1896 *The Illustrated Guide to Colchester and Neighbourhood*. London: Jarrold
- Lodge, B 1858 'Remarks upon a Roman urn, found near the Lexden Road, Colchester'. *Trans Essex Archaeol Soc* **1**, 128–32
- Lloyd-Morgan, G 1981 *The mirrors* (Descriptions of the Collections in the Rijksmuseum G M Kam at Nijmegen 9). Nijmegen: Ministry of Culture, Recreation and Social Welfare
- Luff, R 1982 *A Zooarchaeology Study of the Roman North-Western Provinces* (BAR Internat Ser 137). Oxford: BAR
- Luff, R 1985 'The fauna', in Niblett, R *Sheepen: An Early Roman Industrial Site at Camulodunum* (CBA Res Rep 57). London: CBA, 143–9
- Mabbitt, J 1998 'Colchester's Civil War siegeworks; an archaeological survey'. Unpublished MA dissertation, Univ York
- Mattingley, D 2006 *An Imperial Possession; Britain in the Roman Empire*. London: Penguin Books
- McGrail, S 1990 'Boats and boatmanship in the late prehistoric southern North Sea and Channel region', in McGrail, S (ed) *Maritime Celts, Frisians and Saxons* (CBA Res Rep 71). London: CBA, 32–48
- MacIvor, I, Thomas, M C and Breeze, D J 1981 'Excavations on the Antonine Wall fort of Rough Castle, Stirlingshire, 1957–61'. *Proc Soc Antiq Scotl* **110** (1978–80), 230–85
- McMaster, I and Evans, K 1996 *Mount Bures: Its Lands and its People*. Bures: private publication
- McWhirr, A 1979 'Tile-kilns in Roman Britain', in McWhirr, A (ed) *Roman Brick and Tile: Studies in Manufacture, Distribution, and Use in the Western Empire* (BAR Internat Ser

- 68). Oxford: BAR, 97–191
- Malim, T, Penn, K, Robinson, B, Wait, G and Welsh, K 1996 'New evidence on the Cambridgeshire Dykes and Worsted Street Roman road'. *Proc Cambridge Antiq Soc* **85**, 27–122
- Mann, J C 1983 *Legionary Recruitment and Veteran Settlement during the Principate* (University of London Institute of Archaeology Occasional Publication 7). London
- Margary, I D 1955 *Roman Roads in Britain*, vol 1. London: Phoenix House
- Marsden, I 1810 *The History and Antiquities of the Borough of Colchester*. Colchester: Marsden
- Martin, G 1959 *The Story of Colchester from Roman Times to the Present Day*. Colchester: Benham
- May, T 1930 *Catalogue of the Roman Pottery in the Colchester and Essex Museum*. Cambridge: Cambridge University Press
- Mays, M 1992 'Inscriptions on British Celtic coins'. *Numis Chron* **152**, 57–82
- Mawer, C F 1995 *Evidence for Christianity in Roman Britain: The Small-Finds* (BAR Brit Ser **243**). Oxford: Tempus Reparatum
- Medlycott, M (forthcoming) *Great Chesterford Roman Town, Essex*, East Anglian Archaeology. Essex County Council
- Menuge, A 1997 'The Rose and Crown Hotel'. *Colchester Archaeol* **11**, 22–3
- Merrifield, R 1987 *The Archaeology of Ritual and Magic*. London: Batsford
- Metcalfe, D M 1993 *Thrymsas and Sceattas in the Ashmolean Museum Oxford Vol 1*. London: Royal Numismatic Society (Special Publication **27A**) and Ashmolean Museum, Oxford
- Metcalfe, D M 1998 *An Atlas of Anglo-Saxon and Norman Coin Finds, c.973–1086*. London: Royal Numismatic Society (Special Publication **32**) and Ashmolean Museum, Oxford
- Metcalfe, D M and Lean, W 1993 'The Battle of Maldon and the minting of crux pennies in Essex: *Post Hoc Propter Hoc?*' in Cooper, J (ed) *The Battle of Maldon: Fiction and Fact*. London: The Hambledon Press, 205–24
- Metzler, J, Waringo, R, Bis, R and Metzler-Zens, N 1991 *Clemency et les Tombes de l'Aristocratie en Gaule Belgique* (Dossiers d'Archéologie du Musée National d'Histoire et d'Art **1**). Luxembourg
- Middleton, P, Edwards, H and Villar, S J 2006 'Coloured in Colchester: Raman spectroscopic study of painted wall plaster from the Roman town of Colchester' in Ottaway, P J (ed) *A Victory Celebration: Papers on the Archaeology of Colchester and Late Iron Age–Roman Britain Presented to Philip Crummy*. Colchester: Colchester Archaeological Trust, 69–74
- Millett, M 1987 'Boudicca, the first Colchester potters' shop, and the dating of Neronian Samian'. *Britannia* **18**, 93–123
- Millett, M 1990 *The Romanization of Britain*. Cambridge: Cambridge University Press
- Millett, M J 1995 'An early Christian community at Colchester?' *Arch J* **152**, 451–4
- Millett, M J 1999 'Coloniae and Romano-British studies', in Hurst, H (ed) *The Coloniae of Roman Britain: New Studies and a Review* (*J Roman Archaeol Supp Ser* **36**), 191–6
- Moore, S A 1897 *Cartularium Monasterii Sancti Johannis Baptiste de Colcestria*, vol 1. London: Roxburghe Club
- Morant, P 1768 *The History and Antiquities of Colchester* (2 vols). London
- Muckleroy, K, Haselgrove, C and Nash, D 1978 'A pre-Roman coin from Canterbury and the ship represented on it'. *Proc Prehist Soc* **44**, 439–44
- Murphy, P 1996a 'Environmental archaeology', in Bedwin, O (ed) *The Archaeology of Essex. Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 168–80
- Murphy, P 1996b 'Assessment of environmental remains', in Shimmin, D and Carter, G

- 'Excavations at Angel Yard, High Street, Colchester 1986 and 1989'. *Essex Archaeol Hist* **27**, 35–83
- Murphy, P 1997 'Environment and economy', in Glazebrook, J (ed) *Research and Archaeology: A Framework for the Eastern Counties, 1. Resource Assessment* (East Anglian Archaeology Occasional Paper 3). Norwich: Scole Archaeological Committee, 63–5
- Murphy, P 2000a 'Urban environmental archaeology', in Brown, N and Glazebrook, J (ed) *Research and Archaeology: A Framework for the Eastern Counties 2. Research Agenda and Strategy* (E Anglian Archaeol Occasional Paper 8). Norwich: Scole Archaeological Committee, 31–2
- Murphy, P 2000b Unpublished note on plant remains from Long Wyre Street, Colchester (Colchester Museums, archive)
- Musty, J 1975 'A brass sheet of first century AD date from Colchester'. *Antiq J* **LV**, 409–11
- Myres, J N L 1986 *The English Settlements* (The Oxford History of England **1B**). Oxford: Oxford University Press
- Nash, F 1997 'The defences of Colchester'. *Essex Archaeology* **14**, iv–v
- Nash, F 2002 'World War Two defences in Essex'. *After the Battle* **116**, 30–5
- Neal, D S 1981 *Roman Mosaics in Britain*. Gloucester: Alan Sutton
- Neal, D S and Cosh, S R 2009 *Roman mosaics of Britain*. vol **III**, pt 2. London: Society of Antiquaries of London
- Niblett, B R K 1982 'Excavations on the west side of the castle bailey'. *Archaeol J* **139**, 342–7
- Niblett, B R K 1985 *Sheepen: An Early Roman Industrial Site at Camulodunum* (CBA Res Rep 57). London: CBA
- Niblett, B R K 1999 *The Excavation of a Ceremonial Site at Folly Lane, Verulamium* (Britannia Monogr Ser 14). London: Society for the Promotion of Roman Studies
- Niblett, B R K 2001 *Verulamium: The Roman City of St Albans*. Stroud: Tempus
- Niblett, B R K and Thompson, I 2005 *Alban's Buried Towns: An Assessment of St Albans' Archaeology up to AD 1600*. Oxford: Oxbow
- Northover, P 1985 'Analysis of bronze cauldron from Sheepen, Colchester'. Unpublished (Colchester Museums archive)
- O'Connor, T P 1984 'Archaeogastronomy'. *Archaeol York* **10(1)**, 26–7
- O'Connor, T P 1989 *Bones from the General Accident Site, Tanner Row [York]* (Archaeol York, 15/2). London: CBA
- Orr, K 2001a 'An archaeological watching brief on one section of an Anglian Water main Spring Lane, Lexden, Colchester April–September 2001'. *CAT Report* **160**
- Orr, K 2001b 'An archaeological evaluation at North Station Road (adjacent to the Victoria Inn), Colchester, Essex August 2001'. *CAT Report* **163**
- Orr, K 2002a 'An archaeological watching brief at Lexden Wood Golf Club (Westhouse Farm), Colchester, Essex'. *CAT Report* **167**
- Orr, K 2002b 'An archaeological evaluation at the rear of 36 North Hill (Byron's Yard), Colchester, Essex: February 2002'. *CAT Report* **177**
- Orr, K 2006 'An archaeological evaluation, watching brief and limited excavation at 15 West Lodge Road, Colchester, Essex, September 2004–September 2005'. *CAT Report* **318**
- Orr, K 2010 'Archaeological excavations at 1 Queens Road (Handford House, now 'Handford Place'), Colchester, Essex, 2003 and 2004–2005. *CAT Report* **323**
- Orr, K and Crummy, P 2004 'New light on old problems'. *Colchester Archaeol* **17**, 2–7
- Partridge, C 1981 *Skeleton Green: A Late Iron Age and Romano-British Site* (Britannia Monogr Ser 2). London: Society for the Promotion of Roman Studies
- Partridge, C 1989 *Foxholes Farm: A Multi-Period Gravel Site*. Hertford: Hertfordshire

Archaeological Trust

- Partridge, J 1993a 'The investigation of cropmarks at Church Lane, Stanway, Colchester'. *Essex Archaeol Hist* **24**, 214–18
- Partridge, J 1993b 'The excavation of a lift shaft at Colchester Castle'. *Essex Archaeol Hist* **24**, 234–6
- Pearson, A F 2005 'Barbarian conspiracy and the Saxon Shore: a reappraisal'. *Oxford J Archaeol* **24** (1), 73–88
- Peers, C 1930 'Anniversary address'. *Antiqs J* **X**, 201–16
- Peers, C 1933 'Anniversary address'. *Antiqs J* **XIII**, 217–28
- Peers, C 1964 *St Botolph's Priory* (Department of the Environment Official Handbook). London: HMSO
- Percival, J 1976 *The Roman Villa: An Historical Introduction*. London: Batsford
- Perring, D 1989 'Cellars and cults in Roman Britain'. *Archaeol J* **146**, 279–301
- Perring, D 2002 *The Roman House in Britain*. London: Routledge
- Perring, D and Brigham, T 2000 'Londoninium and its hinterland: the Roman period', in Museum of London (ed), *The Archaeology of Greater London*. London: Museum of London Archaeology Service, 119–70
- Perring, D, Roskams, S and Allen, P 1991 *Early Development of Roman London West of the Walbrook. The Archaeology of Roman London, Vol 2* (CBA Res Rep **70**). London: CBA
- Petchey, M R 1979 'A prehistoric enclosure at Chitts Hill, Colchester'. *Essex Archaeol Hist* **9**, 17–19
- Petchey, M R 1980 'The archaeology of medieval Essex towns', in Buckley, D G (ed) *Archaeology in Essex to AD 1500* (CBA Res Rep **34**). London: CBA, 113–17
- Peterson, J 1997 'The centuriation of CCAA: a research proposal'. <www.sys.uea.ac.uk/Research/researchareas/JWMP/koeln/koelnprop.html> accessed 6 December 2008
- Phillips, E J 1975 'The gravestone of M. Favonius Facilis at Colchester'. *Britannia* **VI**, 102–6
- Phillips, A 1985 *Ten Men and Colchester* (Essex Records Office Publication **89**). Chelmsford: Essex Record Office
- Phillips, A 2002 *Steam and the Road to Glory: The Paxman Story*. Colchester: Hervey Benham Charitable Trust
- Philpott, R 1991 *Burial Practices in Roman Britain* (BAR Brit Ser **219**). Oxford: BAR
- Pitts, M 2005 'Pots and pits: drinking and deposition in Late Iron Age south-east Britain'. *Oxford Journal of Archaeology* **24**(2), 143–61
- Pitts, M and Perring, D 2006 'The making of Britain's first urban landscapes: the case of Late Iron Age and Roman Essex'. *Britannia* **37**, 189–212
- Platt, C 1976 *The English Medieval Town*. London: Secker & Warburg
- Pooley, L and Benfield, S 2005 'Excavations at Abbotstone Field, Bellhouse Pit, Tarmac Colchester Quarry, Warren Lane, Stanway 1999–2001'. *CAT Report* **312**
- Pooley, L, Holloway, B, Crummy, P and Masefield, R 2006 'Assessment report on the archaeological investigations carried out on Areas C1, C2, E, J1, O, Q and S1 of the Alienated Land, Colchester Garrison'. *CAT Report* **361**
- Porter, S 1986 'Property destruction in the English Civil War'. *Hist Today* **36**, 36–41
- Pounds, N J G 1990 *The Medieval Castle in England and Wales: A Social and Political History*. Cambridge: Cambridge University Press
- Price, J 1977 'The glass', in Saunders, C and Havercroft, A B 'A kiln of the potter Oastrius and related excavations at Little Munden Farm, Bricket Wood'. *Hertfordshire Archaeol* **5** (1978), 109–56

- Racham, J and Sidell, J 2000 'London's landscapes: the changing environment', in Kendall, M (ed) *The Archaeology of Greater London*. London: Museum of London Archaeology Service
- Rackham, O 1980 'The medieval landscape of Essex', in Buckley, D G (ed) *Archaeology in Essex to AD 1500* (CBA Res Rep 34). London: CBA, 103–8
- Rackham, O 1986a 'The ancient woodland of England: The woods of south east Essex'. Rochford: Rochford District Council
- Rackham, O 1986b *The History of the Countryside*. London: J M Dent
- Rackham, O 1999 'Woods, parks and forests: the Cressing Temple Story', in Green, L S (ed) *The Essex Landscape: In Search of History*. Chelmsford: Essex County Council, 29–34
- RCHME 1922 *An Inventory of the Historical Monuments in Essex, Vol III: North-East Essex*. London: HMSO
- Reaney, P H 1935 *The Place-Names of Essex*. Cambridge: Cambridge University Press
- Reece, R 1999 *Later Roman Empire*. Stroud: Tempus
- Rees, H, Crummy, N, Ottaway, P J and Dunn, G 2008 *Artefacts and Society in Roman and medieval Winchester*. Winchester: Winchester City Council
- Reid, E B 1914 'Lollards at Colchester in 1414'. *English Historical Review* 29, 101–4
- Renn, D F 1968 *Norman Castles in Britain*. London: Baker
- Renn, D F 1982 'The decoration of Canterbury Castle keep', in Coldstream, N and Draper, P (eds) *Medieval Art and Architecture at Canterbury before 1220*. London: British Archaeological Association, 125–8
- Reynolds, S 1977 *An Introduction to the History of English Medieval Towns*. Oxford: Clarendon Press
- RIB 1 1965 *The Roman Inscriptions of Britain Vol 1, Inscriptions on stone* (Collingwood, R G and Wright, R P (eds)). Oxford : Clarendon Press
- RIB 2 1994 *The Roman inscriptions of Britain Vol II, Fascicule 6* (Frere, S and Tomlin, R (eds)).
- Richardson, K M 1961 'Excavations in Lewis's Gardens, Colchester, 1955 and 1958'. *Trans Essex Archaeol Soc* 1(1), 7–36
- Rickword, G 1905 'The Colchester hoard'. *Brit Numis J* 1st series 1, 113–22
- Rickword, G 1906 'Taxations of Colchester, A.D. 1296 and 1301'. *Trans Essex Archaeol Soc* 9, 126–55
- Rickword, G 1923 'The obits of the abbots of Colchester'. *Trans Essex Archaeol Soc* 16, 122–6
- Rigby, V 1979 'The Gallo-Belgic imports from Exeter – a summary', in Bidwell, P T *The Legionary Bath-House and Basilica and Forum at Exeter* (Exeter Archaeol Rep I). Exeter: Exeter City Council
- Rigby, V 1986a 'Gaulish fine-ware imports', in Stead, I M and Rigby, V *Baldock: The Excavation of a Roman and Pre-Roman Settlement, 1968–72* (Britannia Monogr Ser 7). London: Society for the Promotion of Roman Studies, 223–34
- Rigby, V 1986b 'Stratified groups of Iron Age and Roman pottery', in Stead, I M and Rigby, V *Baldock: The Excavation of a Roman and* Shimmin, D 1994 *Pre-Roman Settlement, 1968–72* (Britannia Monogr Ser 7). London: Society for the Promotion of Roman Studies, 257–80
- Rigg, J M and Jenkinson, H 1905 *Calendar of the Plea Rolls of the Exchequer of the Jews Preserved in the Public Record Office*. London: Macmillan & Co
- Rigold, S E 1975 'The Sutton Hoo coins in the light of the contemporary background of coinage in England', in Bruce-Mitford, R *The Sutton Hoo Ship-Burial*, vol I. London:

- British Museum, 653–78
- Rippon, S 1991 'Early Planned Landscapes in South-East Essex'. *Essex Archaeol Hist* **22**, 46–60
- Rippon, S 1996 'Essex c. 700–1066', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 117–29
- Ritterling, E 1913 *Das Frühromische Lager bei Hofheim in Taunus*. Weisbaden
- Rivet, A L F and Smith, C 1979 *The Place-Names of Roman Britain*. Princeton, NJ: Princeton University Press
- Rodwell, K A 1988 *The Prehistoric and Roman Settlement at Kelvedon, Essex* (Chelmsford Archaeological Trust Report **6**/CBA Res Rep **63**). London: CBA
- Rodwell, W J 1975 'Milestones, civic territories and the Antonine Itinerary'. *Britannia* **6**, 76–101
- Rodwell, W J 1978a 'Buildings and settlements in south-east Britain in the late Iron Age', in Cunliffe, B and Rowley, T (eds) *Lowland Iron Age Communities in Europe* (BAR Int Ser **48**). Oxford: BAR, 25–41
- Rodwell, W J 1978b 'Rivenhall and the emergence of first-century villas in northern Essex', in Todd, M (ed) *Studies in the Romano-British Villa*. Leicester: Leicester University Press, 11–32
- Rodwell, W J 1979 'Iron Age and Roman salt-winning on the Essex coast' in Burnham, B C and Johnson, H B (eds), *Invasion and Response* (BAR Brit Ser **73**). Oxford: BAR, 133–75
- Rodwell, W J 1982 'The production and distribution of pottery and tiles in the territory of the Trinovantes'. *Essex Archaeol Hist* **14**, 15–76
- Rodwell, W J 1996 'Archaeology in Essex since 1945: a review', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 199–206
- Rodwell, W J 1993a *The Origins and Early Development of Witham, Essex: A Study in Settlement and Fortification, Prehistoric to Medieval* (Oxbow Monogr **26**). Oxford: Oxbow
- Rodwell, W J 1993b 'The Battle of Assandun and its memorial church: a reappraisal', in Cooper, J (ed) *The Battle of Maldon: Fiction and Fact*. London: The Hambledon Press, 127–58
- Rodwell, W J and Rodwell, K A 1977 *Historic Churches – A Wasting Asset* (CBA Res Rep **19**). London: CBA
- Rodwell, W J and Rodwell, K A 1986 *Rivenhall: Investigations of a Villa, Church and Village, 1950–1977* (Chelmsford Archaeol Trust Rep **4**/CBA Res Rep **55**). London: CBA
- Rose, J, Allen, P and Hey, R W 1976 'Middle Pleistocene stratigraphy in southern East Anglia'. *Nature* **263**, 492–4
- Roskams, S 1999 'The hinterlands of Roman York: present patterns and future strategies', in Hurst, H R (ed) *The Coloniae of Roman Britain: New Studies and a Review* (J Roman Archaeol Supp Ser **36**), 45–72
- Ross, A 1999 *Druids*. Stroud: Tempus
- Round, J H 1882 *The History and Antiquities of Colchester Castle*. Colchester: Benham (published anonymously)
- Round, J H 1889 'Some documents relating to Colchester Castle'. *Trans Essex Archaeol Soc* **3**, 143–54
- Rouse, E C 1982 'Late Saxon painted wall plaster', in Drury, P J 1982 'Aspects of the origins and development of Colchester Castle'. *Archaeol J* **139**, 350–3

- Rudsdale, E J 1933 'Inhumation burials of the Roman period discovered at Colchester'. *Trans Essex Archaeol Soc* **20**, 289–91
- Rudsdale, E J 1948 'Some notes on the Siege of Colchester'. *Essex Review* **LVII**, 161–72
- Ryan, P 1996 *Brick in Essex from the Norman Conquest to the Reformation*. Chelmsford: private publication
- Salway, P 1993 *The Oxford Illustrated History of Roman Britain*. Oxford: Oxford University Press
- Sauer, E 2001 'Alchester Roman fortress'. *Curr Archaeol* **173**, 189–91
- Sawyer, P H 1968 *Anglo-Saxon Charters: An Annotated List and Bibliography*. London, Royal Historical Society
- Schama, S 2000 *A History of Britain*, vol 1. London: BBC
- Schofield, J 1997 'Urban housing in England 1400–1600', in Gaimster, D and Stamper, P (eds) *The Age of Transition: The Archaeology of English Culture 1400–1600* (Soc Medieval Archaeol Monogr Ser **15**/Oxbow Monogr **98**). Oxford: Oxbow, 127–55
- Schofield, J 2003 'Some aspects of the Reformation of religious space in London 1540–1660', in Gaimster, D and Gilchrist, R *The Archaeology of the Reformation 1480–1580* (The Society for Post Medieval Archaeology Monograph **1**). Leeds: Manley
- Sealey, P R 1985 *Amphoras from the 1970 Excavations at Colchester Sheepen* (BAR Brit Ser **142**). Oxford: BAR [AQ5 Amphoras is correct]
- Sealey, P R 1987 'A late Bronze Age hoard from Fingringhoe'. *Essex Archaeol Hist* **18**, 7–15
- Sealey, P R 1995 'New light on the salt industry and Red Hills of prehistoric and Roman Essex'. *Essex Archaeol. Hist* **26**, 65–81
- Sealey, P R 1996 'The Iron Age', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 46–68
- Sealey, P 1997 *The Boudican Revolt against Rome*. Princes Risborough: Shire
- Sealey, P R 1999 'Finds from the cauldron pit', in Brown, N R, *The archaeology of Ardleigh, Essex: excavations 1955–1980* (E Anglian Archaeol Rep **90**). Chelmsford: Essex County Council, 117–24
- Sealey, P R 2004 *The Boudican Revolt against Rome* (Shire Archaeology **74**). Princes Risborough: Shire
- Sealey, P R 2006a 'The prehistoric pottery', in Brooks, H and Masefield, R *A watching brief at Colchester New Garrison (Phase 1), Colchester, Essex February 2004–August 2005* (CAT/RPS Report 357), 25
- Sealey, P R 2006b 'Two new decorated Iron Age mirrors from Essex' in P Ottaway (ed), *A victory celebration, papers on the archaeology of Colchester and Late Iron Age-Roman Britain presented to Philip Crummy*. Colchester: Friends of Colchester Archaeol Trust, 11–18
- Sealey, P R 2007 *A Late Iron Age Warrior Burial from Kelvedon, Essex* (E Anglian Archaeol Rep **118**). Colchester: Colchester Museums
- Sealey, P R 2009 'New light on the wine trade with Julio-Claudian Britain'. *Britannia* **40**, 1–40
- Sermon, R 1996 'Gloucester Archaeology Unit annual report 1995'. *Glevensis* **29**, 13–23
- Sermon, R 1997 'Gloucester Archaeology Unit annual report 1996'. *Glevensis* **30**, 40–50
- Shimmin, D 1994 'Excavations at Osborne Street, Colchester'. *Essex Archaeol Hist* **25**, 46–59
- Shimmin, D 1997 'Archaeological evaluation at the former maternity home, Lexden Road, Colchester: summary report'. *CAT Archive Report 5*
- Shimmin, D 1998a 'ASDA superstore site'. *Colchester Archaeol* **11**, 13
- Shimmin, D 1998b 'Late Iron Age and Roman occupation site at Kirkee McMunn

- barracks, Colchester'. *Essex Archaeol Hist* **29**, 260–9
- Shimmin, D 2006a 'An archaeological watching brief on a BT cable trench from Head Street to Southway, Colchester, Essex, August–October 2006'. *CAT Report* **394**
- Shimmin, D 2006b 'Stage 2 of an archaeological evaluation at the rear of 95–96 High Street, Colchester, Essex, July 2006'. *CAT Report* **380**
- Shimmin, D 2008a 'Archaeological Investigations at Turner Rise, Colchester, Essex, 1996–99'. *CAT Report* **332**
- Shimmin, D 2008b 'Report on a watching brief at 99 High Street, Colchester, Essex, December 2006'. *CAT report* **440**
- Shimmin, D and Carter, G 1996 'Excavations at Angel Yard, High Street, Colchester 1986 and 1989'. *Essex Archaeol Hist* **27**, 35–83
- Shotton, F W, Sutcliffe, A J and West, R G 1962 'The fauna and flora from the brick pit at Lexden, Essex'. *Essex Nature* **31** (1962–6), 15–22
- Sier, L C 1924 'Crouched Friars: Colchester'. *Essex Rev* **33**, 14–17, 200–4
- Simpson, G 1982 'A revised dating for the Colchester samian kiln'. *Essex Archaeol Hist* **14**, 149–53
- Singer, R, Wymer, J J, Gladfelter, B G and Wolff, R G 1973 'Clacton-on-Sea, Essex: report on excavations 1969–70'. *Proc Preh Soc* **39**, 6–74
- Smith, C R 1847 'Notes on Roman remains at Colchester'. *J Brit Arch Assoc* **II** (1846), 29–45
- Smith, C R 1852 *Collectanea Antiqua* II. London
- Smith, C R 1854 'Letter to the Essex County Standard'. *Gentleman's Magazine* (Jan 1854), 70–1
- Smith, C R 1868 *Collectanea Antiqua* VI: *Etchings and Notices of Ancient Remains Illustrative of the Habits, Customs and History of Past Ages*. London
- Smith, D J 1984 'Roman mosaics in Britain: a synthesis', in Farioli Campanati, R (ed) *Il Mosaico Antico. III colloquio internazionale sul mosaico antico*. Ravenna, 357–80
- Somerset Fry, P 1990 *Castles of the British Isles*. London: David & Charles
- Sparrow, A C 1943 'Precinct wall, St John's Abbey, Colchester'. *The Essex Review* **206 (vol LII)**, 67–70
- Stead, I M 1967 'A La Tène III burial at Welwyn Garden City'. *Archaeologia* **101**, 1–62
- Stead, I M and Rigby, V 1989 *Verulamium: The King Harry Lane Site* (Engl Heritage Archaeol Rep **12**). London: HBMCE
- Stenning, D F 1994 'The Red Lion Hotel, Colchester'. *Essex Archaeol Hist* **25**, 134–59
- Stenton, F 1947 *Anglo-Saxon England*. Oxford: Oxford University Press
- Stephenson, D 1978 *The Book of Colchester*. Chesham: Barracuda Books
- Stephenson, D 1979a 'Cesterwald reconsidered'. *Essex Archaeol Hist* **11**, 111–12
- Stephenson, D 1979b 'Stanway: æt Stanwægun'. *Essex Archaeol Hist* **11**, 115
- Stephenson, D 1982 'The *Colchester Chronicle* and the early history of Colchester Castle: a preliminary analysis'. *Archaeol J* **139**, 409–13
- Stephenson, D 1986 'Colchester: a smaller medieval English jewelry'. *Essex Archaeol Hist* **16** (1984–5), 48–52
- Struck, M 1997 'Review: excavations of Roman and later cemeteries, churches and monastic sites in Colchester 1971–88'. *Britannia* **28**, 496–8
- Stuiver, M (ed) 1986 'Calibration issue: proceedings of the 12th International Radiocarbon Conference, Trondheim, Norway (1985)'. *Radiocarbon* **28**, 863–910
- Sumbler, M G and Sherlock, R L 1996 *London and the Thames Valley: British Regional Geology*. London: HMSO

- Swan, V G 1984 *The Pottery Kilns of Roman Britain* (Roy Comm Hist Monuments Engl Suppl Ser 5). London: HMSO
- Swift, E 2000 *Regionality in dress accessories in the late Roman west* (Instrumentum Monogr 11). Montagnac: Éditions Monique Mergoil
- Symonds, R P 1996 'The Roman pottery', in Shimmin, D and Carter, G 'Excavations at Angel Yard Colchester, 1986 and 1989'. *Essex Archaeol Hist* 27, 71–2
- Tait, J 1936 *The Medieval English Borough: Studies on its Origins and Constitutional History* (Publications of the University of Manchester 245). Manchester: Manchester University Press
- Tatton-Brown, T 1980 'The use of Quarr stone in London and East Kent'. *Med Archaeol* 24, 213–15
- Taylor, H M and Taylor, J 1965 *Anglo Saxon Architecture Vol 1*. Cambridge: Cambridge University Press
- Thomas, A 1998 'Former Moler Works, Hythe, Colchester'. *Cotswold Archaeological Trust Archive Report*
- Thompson, I 1982 *Grog-tempered 'Belgic' Pottery of South-Eastern England* (BAR Brit Ser 108(i–iii)). Oxford: BAR
- Thompson, J D A 1956 *Inventory of British Coin Hoards AD 600–1500* (Roy Numis Soc Spec Publ 1). Oxford: Oxford University Press
- Timby, J and Rigby, V 2007 *Gallo-Belgic pottery in Britain* <http://gallobelgic.thehumanjourney.net>
- Timby, J, Brown, R, Biddulph, E, Hardy, A and Powell, A 2007 *A slice of Rural Essex: Recent archaeological discoveries from the A 120 between Stansted Airport and Braintree* (Oxford Wessex Archaeol Monogr 1). Oxford
- Todd, M 1985 'Oppida and the Roman army: a review of recent evidence'. *Oxford J Archaeol* 4, 187–99
- Toynbee, J M C 1962 *Art in Roman Britain*. London: Phaidon
- Toynbee, J M C 1964 *Art in Britain under the Romans*. Oxford: Clarendon Press
- Toynbee, J M C 1971 *Death and Burial in the Roman World*. London: Thames and Hudson
- Turner, C 1970 'The Middle Pleistocene deposits at Marks Tey, Essex'. *Phil Trans Roy Soc London* B257, 373–440
- Turner, R 1984 'Excavations at St Mary's Church, West Bergholt, Essex, 1978', in Turner, R and Priddy, D (eds) *Four Church Excavations in Essex* (Essex County Council Occasional Paper 4). Chelmsford: Essex County Council, 43–63
- Turner, T M 1945 'Pennies of the Colchester mint'. *Brit Numis J* XXIV (3rd series vol IV 1941–44), 8–21
- Tyers, P A 1996 *Roman Pottery in Britain*. London: Batsford
- Tyler, S 1995 'The early Saxon cemetery', in Wymer, J J and Brown, N R *Excavations at North Shoebury: Settlement and Economy in South-East Essex 1500 BC–AD 1500* (E Anglian Archaeol Rep 75). Chelmsford: Essex County Council, 46–52
- Tyler, S 1996 'Early Anglo-Saxon Essex', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 108–16
- Urry, W 1967 *Canterbury under the Angevin Kings*. London, Athlone Press
- Van Arsdell, R D 1989 *Celtic Coinage of Britain*. London: Spink
- VCH 1903 *The Victoria History of the County of Essex, Vol. I*. London: Constable
- VCH 1963 *The Victoria History of the County of Essex, Vol III*. London: Oxford University Press
- VCH 1994 *The Victoria History of the County of Essex, Vol IX*. Oxford: Oxford University

Press

- VCH 2001 *The Victoria History of the County of Essex, Vol X*. Oxford: Oxford University Press
- Wacher, J 1995 *The Towns of Roman Britain*, 2nd edn. London: Batsford
- Wacher, J 1998a *Roman Britain*, 2nd edn. London: Dent
- Wacher, J 1998b 'The dating of town walls in Roman Britain', in Bird, J (ed) *Form and Fabric: Studies in Rome's Material Past in Honour of B R Hartley* (Oxbow Monogr 80). Oxford: Oxbow, 41–50
- Wade, A 2001 'Faunal remains', in Brooks, H 'Excavations at 21–31 Long Wyre Street, Colchester, in 1998'. *J Colchester Archaeol Trust* 1 (for the year 2001), 45–50
- Wade, K 1980 'A settlement site at Bonhunt Farm, Wicken Bonhunt, Essex', in Buckley, D G (ed) *Archaeology in Essex to AD 1500* (CBA Res Rep 34), 96–102
- Walker, H 2000 'A summary of the medieval and post-medieval pottery', in Brooks, H 'Excavations at 79 Hythe Hill, Colchester, 1994–5'. *Essex Archaeol Hist* 31, 116–19
- Walker, H 2001 'Summary of medieval and later pottery', in Brooks, H 'Excavations at 21–31 Long Wyre Street, Colchester, in 1998'. *J Colchester Archaeol Trust* 1 (for the year 2001), 43
- Walker, H 2003 'The medieval and later pottery', in Crossan, C 'Excavations at St Mary Magdalen's Hospital, Brook Street, Colchester'. *Essex Archaeol Hist* 34, 127–42
- Wallis, S and Waughman, M 1998 *Archaeology and the Landscape in the Lower Blackwater Valley* (E Anglian Archaeol Rep 82). Chelmsford: Essex County Council
- Walthew, C V 1975 'The town house and the villa house in Roman Britain'. *Britannia* 6, 189–205
- Ward, J C 1996 'Medieval Essex', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 129–35
- Ward Perkins, J B 1937 'English medieval embossed tiles'. *Archaeol J* 94, 128–53
- Watts, D 1991 *Christian and Pagans in Roman Britain*. London: Routledge
- Webster, G 1970 'The military situations in Britain between A.D. 43 and 71'. *Britannia* 1, 179–97
- Webster, G 1985 'The objects of copper alloy – discussion', in Niblett, R *Sheepen: An Early Roman Industrial Site at Camulodunum* (CBA Res Rep 57). London: CBA, 114
- Webster, G (ed) 1988 *Fortress into City: The Consolidation of Roman Britain First Century AD*. London: Batsford
- West, A R 1989 *A History of Easthorpe, Essex*. Private publication
- West, E 1988 'Anti-Dutch feeling in Essex 1570–1728'. *Essex Journal* 23(3), 51–4
- West, S 1985 *West Stow: The Anglo-Saxon Village* (E Anglian Archaeol Rep 24). Ipswich: Suffolk County Planning Department
- Wheeler, R E M 1920 'The vaults under Colchester Castle: a further note'. *J Roman Stud* 10, 87–9
- Wheeler, R E M 1921 'The Balkerne Gate, Colchester'. *Trans Essex Archaeol Soc* 15, 179–89
- Wheeler, R E M 1923 'An insula of Roman Colchester'. *Trans Essex Archaeol Soc* 16, 7–41
- Wheeler, R E M 1929 'A Roman pipe burial from Caerleon, Monmouthshire'. *Antiqs J* 9, 1–7
- Wheeler, R E M and Laver, P G 1921 'Roman Colchester'. *J Roman Stud* 9 (1919), 139–69
- Whiteman, C A and Rose, J 1992 'Thames river sediments of the British Early and Middle Pleistocene'. *Quat Sci Rev* 11, 363–75
- Whittaker, C R 1989 'Supplying the system: frontiers and beyond', in Barrett, J C, Fitzpatrick, A P and Macinnes, L (eds) *Barbarians and Romans in North-West Europe* (BAR Suppl Ser 471). Oxford: BAR, 64–80

- Wickenden, N P 1996 'The Roman towns of Essex', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 76–94
- Wightman, E M 1970 *Roman Trier and the Treveri*. London: Rupert Hart-Davies
- Wild, J P 1984 'Camulodunum and the silk road'. *Current Archaeol* **93**, 44–6
- Wilkes, J 1996 'The status of Londinium', in Bird, J, Hassall, M and Sheldon, H *Interpreting Roman London: Papers in Memory of Hugh Chapman* (Oxbow Monogr 58). Oxford: Oxbow, 27–31
- Wilkinson, T J and Murphy, P L 1995 *Archaeology of the Essex Coast, Volume I: The Hullbridge Survey* (E Anglian Archaeol Rep 71). Chelmsford: Essex County Council
- Williams, A 1996 'The Vikings in Essex, 871–917'. *Essex Archaeol Hist* **27**, 92–101
- Williamson, G C 1889 *Trade Tokens Issued in the Seventeenth Century Vol 1*. London: Elliot Stock
- Willis, S 1990 'Mould-decorated South Gaulish colour-coated cups from Fingringhoe Wick, Essex'. *J Roman Pottery Stud* **3**, 30–4
- Wilson, D M (ed) 1976 *The Archaeology of Anglo-Saxon England*. Cambridge: Cambridge University Press
- Wilson, D R 1970 'Roman Britain in 1969: I Sites explored'. *Britannia* **1**, 268–305
- Wilson, D R 1977 'A first-century fort near Gosbecks, Essex'. *Britannia* **8**, 185–7
- Wiltshire, P 1999 'Ancient pollen'. *Colchester Archaeol* **12**, 15
- Wire, W nd *Journal of William Wire (1804–1857)*. Unpublished typescript in Colchester Museums
- Wise, P J 2000 'Archaeological survey at High Woods Country Park'. *Colchester Archaeol Group Annu Bull* **40**, 5–6
- Wise, P J 2001 'Longinus finds his face'. *Minerva* **12.3**, 43–4
- Wise, P J 2004 'The sceatta', in Brooks, H 'Archaeological excavation at 29–39 Head Street, Colchester, Essex'. *CAT Report* **268**, 28
- Wise, P J 2005 'Facilis finds his bones'. *Minerva* **16.3**, 38–9
- Wise, P J 2009 'A study in Georgian Colchester: 12 and 13 St Botolph's Street'. *Essex Archaeol Hist* **38** (for 2007), 205–10
- Wise, P J forthcoming 'An unusual brooch and the problem of provenance in the study of Anglo-Saxon Colchester'.
- Woodfield, C and Johnson, C 1989 'A Roman site at Stanton Low, on the Great Ouse, Buckinghamshire – excavated by Margaret Jones 1957–58'. *Archaeol J* **146**, 135–278
- Woolf, G 1998 *Becoming Roman; The Origins of Provincial Civilisation in Gaul*. Cambridge: Cambridge: University Press
- Woods, P J 1974 'Types of late Belgic and early Romano-British pottery kilns in the Nene Valley'. *Britannia* **5**, 262–81
- Wrathmell, S 1994 'Rural settlements in medieval England: perspectives and perceptions', in Vyner, B *Building on the Past: Papers Celebrating 150 years of the Royal Archaeological Institute*. London: RAI, 178–94
- Wymer, J J (ed) 1977 *Gazetteer of Mesolithic Sites in England and Wales* (CBA Res Rep 20). London: CBA
- Wymer, J J 1985 *The Palaeolithic Sites of East Anglia*. Norwich: Geo Books
- Wymer, J J 1996 'The Palaeolithic period in Essex', in Bedwin, O (ed) *The Archaeology of Essex: Proceedings of the Writtle Conference*. Chelmsford: Essex County Council, 1–9
- Wymer, J 1999 *The Lower Palaeolithic Occupation of Britain Volume 1*. Salisbury: Wessex Archaeology and English Heritage
- Wymer, J J and Brown, N R 1995 *Excavations at North Shoebury: Settlement and Economy in*

South-East Essex 1500 BC–AD 1500 (E Anglian Archaeol Rep **75**). Chelmsford: Essex
County Council

Yorke, B 1990 *Kings and Kingdoms of Early Anglo-Saxon England*. London: Seaby

Index

Illustrations are indicated by page numbers in *italics* or by *illus* where figures are scattered throughout the text.

- Aaron the Jew 250
- Abberton Dyke 55
- Abbey Field, archaeological evidence
 - Bronze Age 29
 - Iron Age 52
 - early Roman 95
 - later Roman
 - burials 103, 149, 151, 155, 156–7, 159, 172
 - circus 116, 118
- Abbeygate Street *see* Lodders Lane
- Abbotstone, archaeological evidence
 - Bronze Age 28
 - middle Iron Age 22, 25, 30
 - late Iron Age–early Roman 38, 49, 54, 79
- Abundantia 148
- Acland Avenue 29, 45
- Acton collection 4
- Adam of Colchester 242
- Adams Garage 114
- Ælfgar 201
- Ælflaed 201
- aerial surveys 7, 37, 38, 103
- Æthelflaed 201
- Æthelred II 191, 200, 201
- agriculture
 - late Iron Age 47–52, 50
 - Roman 101, 140, 141–2
 - Anglo-Saxon 176, 203
 - early medieval 236–7, 247–8
 - late medieval 275–6
 - post-medieval 294
 - see also* animal bone; field systems; horticulture; plant remains
- Ala I Thracum 72, 74
- All Saints Church 196, 229, 230, 249, 274, 285
- All Saints well 264
- almshouses 282, 285–6
- Alresford 168, 201, 202
- altars, Roman
 - Balkerne Lane 147, 148
 - Middleborough 166
 - Temple of Claudius 102, 119, 143

- western cemetery 148
- Altnacealgach House 65, 168, 169
- Ambiani 46
- amphitheatre 113
- Angel Inn 290
- Angel Yard (Angel Court), archaeological evidence
 - Roman 102, 132, 133, 172
 - Anglo-Saxon 177, 181, 185, 195, 200
 - early medieval 210
 - biological remains 253
 - domestic occupation 234, 235, 236
 - metalworking 244
 - pottery 211
 - late medieval 257, 261, 261, 262, 264
 - post-medieval 261, 282, 283, 289, 291, 293
 - archaeological deposits 16
- Anglo-Saxon Chronicle* 177, 189, 192
- Anglo-Saxon period, early
 - archaeological evidence 179
 - burials 181–3
 - coins 181
 - gazetteer of monuments and finds 338–9
 - occupation 178–81, 180
 - possessions 183
 - pottery 183–4
 - current state of knowledge 184–5
 - finds evidence 177–8
 - future research 187–8
 - historical framework 175–7
 - importance 186–7
 - past work 177
 - preservation 186
- Anglo-Saxon period, late
 - archaeological evidence
 - defences, streets and urban plan 193–6, 194
 - gazetteer of monuments and finds 339
 - manufacturing and trade 200–1
 - pottery and metalwork 199–200, 200
 - religious buildings 196–9, 197, 198
 - secular buildings 199
 - current state of knowledge 204
 - evidence, nature of 192
 - finds evidence 192–3
 - future research 205
 - hinterland 201–4
 - historical framework 189–91
 - importance 205
 - past work 191–2

- preservation 204–5
- animal bone
 - Palaeolithic 19, 25
 - late Iron Age 39, 41
 - Roman 63, 72, 140
 - medieval 248, 251, 253, 268
 - post-medieval 294
- annexe, early Roman
 - colonia* 78, 85, 87, 97
 - fortress
 - defences 62, 68, 75
 - function 70, 75
 - future research 76
 - plan 61, 67
- antefixes, Roman 136
- antler-working
 - Roman 139
 - Anglo-Saxon 178, 181
- apothecaries 291
- Appleby, R J M 37
- aqueduct 73–4, 120
- archaeology, history of
 - antiquarians and collectors 1–5, 3, 4
 - Colchester Archaeological Trust 6–8, 8
 - excavators 5–6, 8
- architectural fragments, medieval 224, 226, 273, 275, 285
- Ardleigh, archaeological/historical evidence
 - Bronze Age 21, 22, 29, 43
 - Iron Age 30, 103
 - Roman 103, 135–6
 - Anglo-Saxon 175
 - medieval 243, 266
 - post-medieval 291
- armour
 - Roman 91–2
 - post-medieval 293
 - see also* chain mail
- Arnoldswick 248
- arrowheads, Anglo-Saxon 181
- Artemis 148
- Artillery Folly, coin hoard 133, 172, 187
- assarting 249
- Athelstan 190, 204
- Audley, Thomas 273, 285
- Aulus Plautius 59, 75
- Austine, John 291
- awl, Bronze Age 22
- axes

Mesolithic 25
Bronze Age
 copper alloy 53
 flint 22
Viking 183, 191, 192
see also handaxes

baking

 Roman 139
 medieval 268

Bale, Major 226, 273

Balfour Beattie 7

Balkerne Gardens

 archaeological deposits 16, 18
 archaeological evidence 90, 96

Balkerne Gate

 archaeological evidence
 early Roman: *colonia* 79, 89–90, 97; fortress 68
 late Roman 104, 108, 108, 109, 110, 114; extramural settlement 163, 164
 Anglo-Saxon 191, 193
 excavations 5, 79

Balkerne Heights (St Mary's Hospital; Union Workhouse)

 archaeological deposits 16, 18
 archaeological/historical evidence
 prehistoric 25, 29
 early Roman 12, 87
 later Roman: burials 103, 149, 155, 157, 158, 164, 165; pottery production 136; road 112; temple 146, 147; water supply 119, 120
 Anglo-Saxon 177, 181
 post-medieval 293
 excavations 3, 7, 8

Balkerne Hill 14, 107, 107, 110, 165

Balkerne Lane, archaeological evidence

 early Roman
 Boudican revolt 80, 82, 96
 buildings 71, 79, 82, 92
 burials/human bone 64, 73
 fortress defences 62, 67, 68, 82
 refuse material 72, 92
 street 66, 69

 later Roman

 buildings 124, 163–5, 164, 172
 dark earth 142
 defences 110
 gravel walkways 106
 horticulture 140
 manufacturing and trade 136, 137, 137, 138–9, 140
 plot boundaries 106

- street 112
- temple 147, 148, 160
- water supply 119, 120
- medieval–post-medieval 210, 250, 293
- Ball, John 256
- Barnhall, cemetery 39, 56, 57, 95
- Barnhall Dyke 42, 55
- barns
 - Roman 132, 133, 141, 183
 - medieval 259
 - post-medieval 284
- barracks
 - Roman 69, 74–5, 79, 83–5, 365
 - post-medieval 299
- barrows
 - Bronze Age 22, 29
 - Iron Age *see* Lexden Tumulus
 - Roman 157
- Bartram, A 292
- Barwick's chantry 285
- basilica, Roman 114, 173
- bastions, medieval 264–5, 265, 277, 287
- bathhouses, Roman
 - early Roman
 - colonia* 83, 88, 89, 98
 - fortress 74, 75
 - later Roman
 - extramural 166
 - future research 173
 - Gosbecks 146
 - Hollytrees Meadow 102
 - Insula 1 128, 129, 130
 - Insula 20 114
 - Insula 30 114, 115, 171
- Battleswick 247, 248, 276
- Bay Hall 292
- Bay House 270, 345
- beads
 - Bronze Age 26
 - Roman 80, 95, 96
 - Anglo-Saxon 181, 182, 182, 183
- bed/couch, Roman 80, 85, 94, 96
- Berechurch, archaeological/historical evidence
 - Roman 168
 - Anglo-Saxon 202
 - medieval 247, 249, 276
- Berechurch Dyke 42, 45, 57
- Berisland *see* Vineyard Street

- Berryfield (Buryfield), archaeological/historical evidence
 - Roman 138, 160, 183, 187
 - medieval 236–7
- Berton 202
- Beverley Road, burials 3, 94, 149, 154, 157–8
- Birch 202
- bishopric, Roman 160
- Black, David and Aileen 38
- Black Brook 42
- Black Death 209, 255, 256
- Black Friars 285
- Blake, Brian 6, 37, 282
- Blind Knights, waterlogged deposits 257
- Blyton, Simon de 271
- bolster chisel 213
- bomb damage 298–300
- bone-working
 - Roman 64, 138–9
 - Anglo-Saxon 201
- Bonnors 270, 346
- Boudican revolt
 - archaeological evidence
 - description 12, 79, 82, 87, 88, 93, 96–7
 - importance and future research 98
 - survival 120–4
 - historical background 78, 89, 100, 143
- Bourne Mill 246–7, 268, 291, 292
- Bourne Pond 263
- Bourne Road, cremation 52
- Bradenham, Lionel de 256
- Braiswick 247, 248
- Braiswick Farm 276
- brass-working
 - Roman 64, 80, 86, 90, 91, 138
 - medieval 245
- brewing
 - Roman 90, 139
 - medieval 245, 267–8
 - post-1700 300
- brick
 - Roman 63, 70, 71, 107, 170
 - reused 238
 - medieval 259
 - post-medieval 290, 347
- bridges
 - Roman 113
 - medieval 230, 264
 - post-medieval 287

- see also* North Bridge
- Brinkley Grove, earthwork 294
- briquettage 47, 64
- Bronze Age period 26–9, 26, 30
- brooches
 - Iron Age 40, 41, 46, 52, 53, 57
 - Roman 80, 81, 91, 96
 - Anglo-Saxon 181, 182, 182, 183, 200
- Brook Street, flints 25
- brothels 262
- Brown and Sons 271
- Bryton, estate 201
- buckles, Anglo-Saxon 182, 183
- building stone
 - early Roman 63, 80
 - later Roman
 - buildings 125
 - circus 119
 - defences 107
 - imported 139
 - temples 143, 144, 145
 - early medieval 238, 239, 241, 242
 - see also* marble veneers
- buildings
 - Iron Age 44, 45, 57
 - early Roman
 - colonia* 78, 82–9
 - fortress 69–70, 71, 74–5
 - techniques 63–4
 - vicus* 73
 - later Roman
 - current state of knowledge 170, 171, 173
 - domestic and commercial: 1st century 120–7, 121, 122, 125; 2nd century 123, 126, 127–31, 129, 130, 134; 3rd century 131–2; 4th century 132–3; extramural 163–5, 164, 166–7
 - public 113–20, 117, 118
 - early Anglo-Saxon 178–80, 180, 184–5, 187
 - later Anglo-Saxon
 - religious 196–9, 197, 198, 202
 - secular 199, 204, 205
 - early medieval
 - cellars 233
 - domestic and commercial 230–5, 231, 237–8, 250, 251–2
 - ecclesiastical 222–30, 222, 224, 225
 - listed 366
 - past work 209–10
 - public 230
 - see also* castle

- late medieval
 - cellars 271
 - domestic and commercial 269–71, 270, 277, 278, 344–8
 - ecclesiastical 271–5, 272
 - gazetteer 344–8
 - listed 366
 - public 263–6, 265
 - surviving 367
- post-medieval
 - domestic and commercial 283, 288–9
 - excavated 289–90, 295, 296, 368
 - listed 366
 - public 286–7
- post-1700 300–1
- Bull Hotel 267
- burh* 177, 185, 187, 189–90, 195, 205
- burials
 - Bronze Age 22, 29
 - Anglo-Saxon 13, 181–3
 - Iron Age 38, 49, 52–4, 55–6, 57
 - early Roman
 - colonia* 81, 93–6, 95
 - fortress 64, 72–3, 75, 76
 - later Roman
 - burial rites 157–9
 - Christian 161–2
 - description (*illus*) 148–57, 159–60, 172
 - early medieval 211, 251
 - late medieval 257, 272, 273, 274–5
 - post-medieval 294, 295
 - see also* cemeteries; cremations
- Burlington Road, coffin 159
- Butt Road, archaeological evidence
 - Bronze Age 29
 - Roman
 - animal bone 140
 - burials 102, 149, 153, 155–6, 158, 160, 161–2
 - church mortuary monument 161, 162, 170, 187
 - manufacturing 135, 139
 - Anglo-Saxon 13, 201
 - medieval 238
 - post-medieval 293
- butter market 286
- Buxton, Robert 291
- Byrhtnoth 190, 191, 201

Calver, H C 89

Cambridge (Cambs), road to 67, 111–12, 203

Camden, William 1, 36, 209

camp, Roman 64, 65

Camulodunon

- archaeological evidence

 - agriculture and field system 47–52, 50

 - burials and ritual structures 48, 49, 52–4

 - dykes 37, 42–3

 - manufacturing and trade 45–7

 - oppidum* 41–2

 - preservation 56

 - settlement 43–5, 51

- current state of knowledge 54–6

- finds evidence 38–41

- future research 57

- historical framework 33–6, 35

- importance 56–7

- past work 36–8

Camulos 34, 146

candlestick manufacture, Roman 136

Cannock Mill 246, 268, 291

Canonswick 248

Canwick 276

Caractacus 36, 59

Carroll Group 7

Cassius Dio 34, 78

castle

- antiquarian activity 1, 79, 209

- archaeological deposits 18

- archaeological evidence 213, 213

 - 1st phase: bailey defences 216; keep 213–16; outer buildings 216

 - 2nd phase: bailey defences 218; keep 217–18; outer buildings 218

 - later changes 218–20

 - late medieval 265–6

 - post-medieval 287

- current state of knowledge and importance 250, 252

- future research 252

- historical background 207, 208, 209

Castle Inn 236

Castle Methodist Church, street 195

Castle Museum 4, 4

Castle Park

- archaeological deposits 16

- archaeological evidence 4, 6, 14

 - early Roman 67, 68, 82

 - later Roman 5, 101–2, 106, 110

 - Anglo-Saxon 182

 - medieval 219, 246, 269

 - post-medieval 293

- Castle Road, watching brief 226
- Catchpool Road, pottery 45
- Le Cateau Barracks 299
- Caters site, excavations 6
- Cattle Market 258
- Catuvellauni 34, 35, 36, 38–9, 55, 59
- cauldron, Bronze Age 22, 26, 27, 31
- Cavalry Barracks, circus 117
- Cedars Road, burials 156, 160
- cellars
 - Roman
 - domestic and commercial buildings 127, 128, 131, 133
 - extramural 163, 166
 - function 147
 - medieval 233, 271
 - post-medieval 282, 290
- cemeteries
 - Bronze Age 22, 29
 - late Iron Age
 - archaeological evidence 41, 52–4
 - discussion 55–6
 - finds evidence 39
 - historical framework 33, 34
 - past work 36
 - early Roman
 - colonia* 93–6
 - fortress 72–3, 75, 76
 - later Roman
 - Christian 161–2
 - excavation evidence 148–50, 172; burial rites 157–9; northern 157; southern 153, 155–7; western 150–5, 151, 152
 - location 150
 - past work 3, 101, 102–3
 - early Anglo-Saxon 177, 181–2, 184, 186, 187
 - late Anglo-Saxon 198
 - early medieval 223, 226, 227, 229
 - late medieval 257, 272, 273, 274, 275
- Central Excavation Unit 22
- centuriation 81, 167, 169
- cess pits
 - medieval 235–6, 238, 264
 - post-medieval 281, 287
- Cestrewald* 203, 248, 249
- chain mail, Iron Age 35, 39, 53
- chambers, funerary 52, 53, 55, 95
- chantries 275, 285
- chapels
 - Anglo-Saxon 191, 197, 204, 214, 216, 218

- medieval 197, 228, 251, 274, 275
- charters, Anglo-Saxon 192
- cheese trade 242
- Chelmsford 100, 104, 252
- Chi-rho symbols 161
- 'Child's Grave' 81, 94, 95
- Childwell 230, 264
- Childwell Brook 244
- Childwell Lane, houses 261
- chimney pots 243
- chimneys 288, 289, 290
- Chiswell 230, 264
- Chiswell Meadow 171, 286–7
- Chitts Hill, archaeological evidence
 - Bronze Age 22, 29, 30, 31
 - Iron Age 48
- Christianity
 - Roman 160–2
 - Anglo-Saxon 176, 205
 - see also* churches
- Church Lane, driveway 29, 48–9
- Church Street 195
- Church Walk
 - cellar 290
 - course of 195
 - see also* St Mary's Cottage
- churches
 - Roman 160, 161–2, 161, 170
 - early Anglo-Saxon 181, 188
 - late Anglo-Saxon
 - archaeological/historical evidence 196– 9, 197, 198, 202
 - current state of knowledge/future research 204–5
 - historical framework 190
 - past work 191–2
 - medieval 222–3, 228–30, 249, 274–5
 - post-medieval 285, 294
- Cintusmus 137
- Circular Road north, circus 116
- circus 100, 103, 116–19, 118, 171
- Civil War
 - archaeological/historical evidence 287, 292, 293–4
 - current state of knowledge/future research 295, 296
 - historical framework 281
 - past work 282
- civitates* 99, 100
- Claudius 35–6, 59, 77, 78, 97
- clay pipes 282, 283, 291
 - manufacture of 282, 283, 291

- cloth seals 259, 268, 283, 293
- Cnut, king of Denmark 214
- Cnut, king of England 191
- Co-op redevelopment 7
- Cock and Pie Court, archaeological deposits 16
- Coel, King, palace 143, 214
- coffins, Roman 154, 155, 156, 157, 159, 161
- Cogidubnus 60
- coin moulds 34, 40, 45, 46
- coins
 - Iron Age 22, 34–5, 34, 35, 36, 41, 46
 - Roman
 - pre-conquest 39, 53
 - post-conquest 63, 92, 96, 133, 134, 172, 187
 - early Anglo-Saxon 178, 181, 187
 - later Anglo-Saxon 190, 191, 192, 200, 200
 - medieval 211–13, 245, 250, 258
 - see also* coin moulds; hoards; mints
- Colchester Archaeological Association 3
- Colchester Archaeological Group 6
- Colchester Archaeological Report series 7
- Colchester Archaeological Trust 6–8
- Colchester Borough Council 6, 7
- Colchester Cemetery, burials 52, 94
- Colchester Chronicle* 143, 207, 214
- Colchester Excavation Committee 5, 6
- Colchester Hundred 201–2
- Colchester Institute, excavation evidence 8
 - Iron Age 36, 40, 43, 44, 52
 - Roman 73, 88, 112, 120
- Colchester Philosophical Society 1
- Colne, river
 - bridge 113
 - dyke 42
 - ford 112
 - liberty 247
 - mills 201, 246, 268
 - supply base 66
- colonia*
 - archaeological deposits 12
 - archaeological evidence
 - Boudican revolt 96–7
 - buildings 82–3; annexe 87; London road ribbon development 86–7; new 85–6; *principia*/forum 89; public 88; reused 83–5; Sheepen 87–8; temples 85, 88–9; theatre and bathhouse 89; unidentified 89
 - cemeteries 93–6
 - creation and hinterland 81–2
 - defences 82

- diet 92–3
- layout 82, 84
- manufacturing and trade 90–2
- monumental arch 89–90
- water supply and drains 90
- current state of knowledge 97
- finds evidence 79–81
- future research 98
- historical framework 77–8
- importance 98
- major excavations 365
- past work 78–9
- preservation 97–8
- columns, Roman 70, 89, 115, 145–6
- combs, Anglo-Saxon 178, 182, 183
- Copford
 - animal bone, Palaeolithic 25
 - church 281
 - settlement, Anglo-Saxon 202
- Copford Hall, barrow 22, 29
- copper-alloy working
 - early Roman 64, 80, 90, 91
 - later Roman 127, 137–8
 - Anglo-Saxon 201
 - medieval 211, 244–5
 - post-medieval 291
 - see also* brass-working
- Corn Hill 239
- corn market 239, 286, 290
- corn-drying ovens 131, 134, 141, 180, 184
- Cott, Peter 38
- Cotter, J 192, 210, 258
- Cotton, M Alwyn 209
- couch *see* bed/couch
- Cowdray Crescent, temple 144
- cranes 263
- Crawford, O G S 6
- Creffield Road, burial 158, 159
- cremation pyres
 - Iron Age 53
 - Roman 95, 138, 154, 157, 159
- cremations
 - Bronze Age 22, 29, 30
 - early–middle Iron Age 29
 - late Iron Age 33, 36, 39, 52, 53
 - early Roman 64, 76, 81, 94, 95–6
 - later Roman
 - description 148–9, 153–5, 156–7

- discussion 157–9, 172
- past work 102–3
- Anglo-Saxon 181, 182
- crematoria 159
- Crispin Court, mosaic 128
- Crockleford Mill 291
- Cromwell Road, burial 182
- crosses, medieval 263; *see also* market cross
- Crouch Street
 - archaeological deposits 16, 18
 - archaeological/historical evidence
 - late Iron Age 45
 - Roman 106–7, 135, 166–7
 - medieval 227, 238, 259, 266, 267, 273
 - post-medieval 291, 294
- crucibles
 - Iron Age 46
 - early Roman 64, 80, 86, 91
 - later Roman 127, 137, 138
 - Anglo-Saxon 192, 201
 - medieval 213, 245, 258
 - post-medieval 291
- Cruddle Mill 268
- Crummy, Nina 210
- Crummy, Philip, work by 6, 7, 36
 - late Iron Age 36, 38
 - early Roman 60, 62, 79
 - Anglo-Saxon 191
 - early medieval 210
- Cruso, Thalaso 36
- Crutched Friars
 - archaeological evidence 210
 - Roman 113
 - early medieval 211, 226–7, 251
 - late medieval 257, 273
 - historical framework 208, 285
- cult objects, Roman 148; *see also* Chi-rho symbols
- Culver Street
 - archaeological deposits 13, 14–16, 18
 - archaeological evidence
 - Neolithic–middle Iron Age 22, 25–6, 25, 28, 31
 - early Roman
 - colonia*: Boudican revolt 96; buildings 79, 83, 86, 89; diet 92; manufacturing 80, 90; street 82
 - fortress 62: buildings 69–70, 71, 74; diet 72; site preparation 67, 68
 - later Roman: burials 160; cultivation 140, 141, 142; defences 106, 107, 108; domestic and commercial buildings (*illus*) 122–4, 127–8, 130, 132, 133; manufacturing and trade 136, 137, 138, 139, 140; public buildings 114, 115; street 106

- early Anglo-Saxon 177, 178–80, 183, 184
- later Anglo-Saxon 195, 199, 200, 204
- early medieval 210; buildings 221, 233–4; manufacturing 246; open space 237; organic materials 213, 241, 248, 253; pits 235, 236; street 221
- late medieval 257, 264, 266, 267–8
- post-medieval 281, 282, 283, 285, 293, 294
- excavations 7
- Cunningham, C M 210, 257–8
- Cunobelin 34–6, 39, 40, 44, 59, 75
- Cunobelin Way, pit 26
- Cups Hotel site, excavation evidence 7
 - early Roman 62, 79, 85, 90–1
 - later Roman 131, 133, 141, 172
 - early Anglo-Saxon 177, 181, 184
 - late Anglo-Saxon 191, 199, 201, 204
 - early medieval 210, 232, 234, 235, 245, 250
 - late medieval 257, 267
 - post-medieval 282, 298
- currency bars 25, 30
- Customs House 287
- Cutts, Revd Edward 5
- Danish settlement 177, 183, 185, 187, 189–90
- Darcy, Lady 286
- dark earth 13, 142, 186
- Dedham, pottery manufacture 291
- defences
 - early Roman
 - colonia* 84
 - fortress 69
 - later Roman
 - description 104, 106–10, 107, 108, 109, 111, 170
 - future research 173–4
 - Anglo-Saxon 193
 - early medieval 220–1, 239
 - late medieval 256, 264–5, 265, 277, 278
 - post-medieval 220, 284, 287, 292, 293–4, 295
 - surveys and excavations 5, 6, 12–13, 277
- dendrochronology 271
- Dennis, Tim 38
- Department of the Environment 7
- deposit model 10–11
 - archaeological deposits 14
 - character of 11
 - sequence and nature of 11–13
 - finds preservation 13–14
 - results of 14–18, 15, 17
- diet

- early Roman 63, 72, 80, 92–3
- later Roman 140–1
- Dilbridge
 - kiln 266
 - manor 276
- disc, walrus ivory 200
- Dissolution 271–2, 279, 285–6
- DNA studies 187
- docks 241, 263
- 'Doctor's Grave' 95–6
- Domesday survey 192, 196, 210
- Donyland 201, 202; *see also* East Donyland; West Donyland
- drains
 - early Roman 72, 89, 90
 - later Roman 115, 117, 119, 128, 166
 - drain arches 110, 111, 141
 - medieval 238, 264
 - post-medieval 282, 287
 - see also* sewers
- droveways
 - Iron Age 29, 30, 48–9, 55, 57
 - Roman 171, 174
 - Anglo-Saxon 202
- druid 96
- Drury, P J 143, 192
- ducking stools 263
- Duddelswell 264
- Dudley, John, earl of Warwick 271
- Dugard Avenue, excavation evidence 29, 48
- Dugard Dyke 54, 169
- Duncan, Dr P M 4, 5, 108, 110
- Duncan's Gate (north-east gate)
 - discovery 4
 - excavation evidence 106, 109, 110, 133
 - future research 187
 - road from 112
- Dunnett, Rosalind (now Rosalind Niblett) 6, 36, 60, 62, 209
- Durotriges 60
- Dutch Bay Hall 280, 286
- Dutch immigrants
 - medieval 241, 255, 277
 - post-medieval 279–80, 284, 286, 293
- Dutch Quarter 14, 16, 284
- Duyts, David 293
- Dyer, Roger 235
- dykes
 - archaeological/historical evidence
 - Iron Age 42–3

- Roman modifications 64–5, 75, 169
- Anglo-Saxon 202
- current state of knowledge 54–5
- future research 57
- location 24
- past work 5, 36–7, 37, 103
- preservation 56

Eadgar 190

Eadsige 200

East Bridge 230, 237–8, 264

East Donyland

- deserted medieval village 249
- kiln 266

East Gate

- archaeological deposits 16
- archaeological/historical evidence
 - Roman 109–10, 112–13
 - Anglo-Saxon 193
 - medieval 221, 265
 - post-medieval 287

East Hill, archaeological/historical evidence 3

- Roman 167
- medieval 266, 344
- post-medieval 284

East Hill House, burials 159–60, 183

East Mersea, fish weir 203

East Mill, archaeological/historical evidence

- Anglo-Saxon 201, 205
- medieval 244, 246, 268
- post-medieval 291, 292

East Saxon kingdom 176

East Stockwell Street

- archaeological deposits 16
- archaeological/historical evidence
 - Roman 60, 67, 74, 76, 114
 - Anglo-Saxon 193, 199
 - medieval 233, 235, 236, 240, 262
 - post-medieval 284

East Street, archaeological/historical evidence

- medieval 244, 264
- post-medieval 288, 289, 293, 294
- see also* Rose and Crown Hotel

Easthorpe

- church 249
- road to 67, 203

Edmund I 190, 201, 204

Edmund le Chaloner 244

- Edward the Elder
 - Balkerne Gate blocking 191, 193
 - burh* restored by 177, 185, 189–90
 - estates 201
 - streets reorganised under 191, 195
- Edward II 240
- Eld Lane 193, 199–200
- Eldland 230
- Eleanor's chantry 285
- Ellis, John 265
- enamelling, late Iron Age–Roman 56, 80, 91
- enclosure, parliamentary 276
- enclosures
 - late Iron Age
 - Gosbecks 45, 48, 53, 54
 - Homefield Road 53–4
 - Sheepen 44–5
 - Stanway 48–9, 49, 53, 55–6
 - middle Iron Age 22, 27, 28, 29–30
 - Roman 75, 95, 144, 145
 - early medieval 248
 - see also* field systems
- Endsleigh School, kilns 92, 97, 135
- engineering, post-1700 297, 298–300, 299
- Epona 148
- Erith, Felix 22
- Essex Archaeological Society 3, 4, 5, 101–2, 146
- Essex County Council 7, 103
- Essex County Hospital, archaeological evidence 1, 3, 112, 152
- Essex Field Club 5
- Eudo Dapifer
 - castle 207, 214, 217, 218
 - landholdings 247
 - St Helen's Chapel 197, 228
 - St John's Abbey 223
 - St Mary's Hospital 227
- Eustace, count of Boulogne 247
- excavations
 - gazetteer 358–64
 - history 5–8
- face-mask manufacture, Roman 136
- Fairfax, Thomas 281
- Fairfax Road, burials 182
- fairs 240, 290
- Falcon Inn 267
- farms, Roman 167, 168
- Favonius Facilis, Marcus, tombstone 72–3, 93, 93

- field systems
 - Iron Age/Roman 7, 38, 48, 50
 - Roman 167
 - Anglo-Saxon 176–7, 202–3
 - medieval 247–8, 275, 276
 - post-medieval 294
 - see also* enclosures
- figurines/statuettes
 - late Iron Age 53
 - early Roman 81, 94, 95, 95
 - later Roman 139, 146, 147, 148
 - post-medieval 283
- Finch, Ralph 286
- Finches Almshouses 285–6
- Fingringhoe, archaeological/historical evidence
 - prehistoric 22, 29
 - Anglo-Saxon 181, 183, 201, 202
- Fingringhoe Wick, Roman supply base 59, 66, 75, 76
- Fire Station, pottery 45
- firedogs 40, 46, 54
- fish bone
 - Roman 72, 141
 - medieval 213, 241, 251, 253
 - see also* shellfish
- fish market 286, 290
- fishing
 - Anglo-Saxon 203
 - medieval 241, 251, 255
 - post-medieval 290
- fishponds 276
- FitzWalter family 208
- Fitzwalter Road, archaeological evidence 112, 135
- Flagstaff House, excavation evidence 224
- Flemings *see* Dutch immigrants
- flints 11–12
 - Palaeolithic 19, 20
 - Mesolithic 19–20, 25
 - Neolithic 20, 25, 26
 - Bronze Age 22, 28, 29
- floor tiles
 - medieval 213, 227, 259, 275
 - post-medieval 282, 290
- foederati* 184
- fora
 - colonia* 89, 98
 - Roman town 114, 115, 173
- fortress
 - archaeological evidence

- fortress 61; barracks 69, 70, 71, 365; burials 72–3; change to *colonia* 82, 98; Claudian occupation and Iron Age continuity 73–4; defences 68; food, water supply and drainage 72; industrial activity 70–2; non-barrack buildings 69–70; siting and construction 67–8; streets 69, 365
- military structures outside fortress: dykes 64–5; Fingringhoe supply base 66; Gosbecks fort 65–6, 65; roads 66–7
- preservation 75–6
- current state of knowledge 74–5
- finds evidence 62–4
- future research 76
- historical framework 59–60
- importance 76
- past work 60–2
- forts
 - Roman
 - Gosbecks 62, 63, 65–6, 65, 75–6
 - North Hill 67
 - Shrub End 7, 65
 - Civil War 293, 294, 295, 296
 - see also* camps, Roman
- Fortuna 148
- Foster, Jennifer 38
- foundry 300
- Foundry Yard 231–2, 231
- Freda Gunton Lodge, archaeological evidence 69, 239
- Friar Street
 - gatehouse 226
 - occupation, medieval 262
- Frog Hall Farm, Bronze Age site 22, 28–9
- fulling mills
 - medieval 243, 246, 255, 268
 - post-medieval 291, 292
- furniture
 - Iron Age 53
 - early Roman 80, 81, 85, 91, 94
 - later Roman 128, 139, 158
- Gallic Chronicle* 175
- Gallows Green 247, 263
- gaming board, Roman 95, 96
- Gant, L H 282
- gaols
 - medieval 230, 263, 265
 - post-medieval 287
- Garrison 297, 299, 300
- Garrison site
 - archaeological evidence
 - prehistoric 25, 53

- early Roman 81
 - later Roman 103, 116, 149, 151, 156–7
 - excavations 3, 7, 8
- Gartree Road 111
- gas mains 1
- gas works 300
- geology 9–10; *see also* deposit model
- George Hotel 267, 347
- Gilberd School, archaeological evidence
 - early Roman
 - colonia* 80, 83, 86, 90, 92, 96
 - fortress 62, 67, 68, 69, 70, 72
 - later Roman 102
 - animal bone 140
 - buildings 131, 132, 133
 - dark earth 142
 - defences 110
 - ironworking 137
 - Anglo-Saxon 201
 - medieval 211, 237, 244, 245, 253
 - post-medieval 293
 - see also* Sixth Form College
- Gildas 175
- glass vessels
 - late Iron Age 33, 39, 40, 46
 - early Roman 63, 80, 91, 92, 95
 - later Roman 102, 136–7, 137, 139, 173
 - medieval 268
 - post-medieval 296
- glass-making
 - Iron Age 56
 - Roman 136
 - medieval 245
 - post-medieval 296
- Glebe Field, pottery 45
- Glen Avenue, Bronze Age bead 26
- Goring, Lord 281
- Gosbecks
 - archaeological evidence
 - Neolithic–middle Iron Age 22, 25, 29, 31
 - late Iron Age 37–8; agriculture 45, 47–8, 50; discussion 54–5, 56; finds evidence 39, 41, 45; future research 57; manufacturing 46; preservation 56
 - early Roman: Boudican revolt 97; continuity 73; finds 63; fort 62, 65–6, 65, 75–6
 - later Roman: agriculture 167, 171; building 168, 171; burials 149–50; future research 174; manufacturing 136, 137, 138, 171; road 111; settlement 103; temples 103, 104, 144, 145–6, 171; theatre 104, 116, 144, 171; water main 120, 171
 - excavations and surveys 4, 6, 7, 37, 103
- Gosbecks Archaeological Park 28, 38, 48, 53

- Gosbecks Dyke 42, 43
- Gosbecks Farm, tile 101
- grammar school
 - medieval 230, 263
 - post-medieval 285
 - see also* Royal Grammar School
- granaries, Roman 87, 130, 141
- Gray, Charles 1
- Great Horkesley, kiln site 210, 243, 257–8, 266
- Great Tey, church 202
- Greenstead
 - administration 247
 - church 202, 249, 294
 - estate, Anglo-Saxon 201
 - manor 276
 - settlement 202
 - woodland 248, 249
- Greenstead Mill 201, 246
- Greenstead Road, villa 168
- Grey Friars 210, 226, 273
- gridirons, Roman 95, 96, 139
- Grimston, Sir Harbottle 285
- Grub Street 196, 222
- Grubenhäuser* *see* sunken-featured buildings
- Gryme's Dyke
 - archaeological evidence
 - late Iron Age 45, 54, 55
 - Roman 97, 103, 111, 169
 - as boundary 202
 - past work 37, 37
- guilds 256, 285
- Gundulf, bishop of Rochester 214
- Gurney Benham House, crematoria 159

- Haddel Mill 243, 246
- Hall, A F 6, 37, 60, 79, 102, 103
- Hampton, John 7
- handaxes 22, 25
- Handford House, archaeological evidence 81, 149, 152, 154
- Harpocrates 148
- Harwich Road, villa 168
- Hawkes, Christopher, work by 5, 6
 - late Iron Age 36, 37, 38
 - Roman 60, 102
- Haynes Green, earthwork 54
- Haynes's chantry 285
- Hayward family 301
- Head Gate

- archaeological deposits 16
- archaeological evidence
 - Roman 109, 113
 - Anglo-Saxon 193
 - medieval 221
 - post-medieval 287
- Head Street (inc Post Office site)
 - archaeological deposits 16
 - archaeological/historical evidence 8, 8
 - Bronze Age 22
 - early Roman 62, 75, 98
 - later Roman 103, 106, 124, 127, 141
 - Anglo-Saxon 193, 195, 204
 - early medieval 233, 234, 236
 - late medieval 267, 271
 - post-medieval 281, 282, 286, 291, 295
 - see also* Rebow House
- Heath Farm Dyke, archaeological evidence 37, 41, 42, 43, 54, 55; *see also* forts, Gosbecks
- heaths 203, 275
- heating tray, Anglo-Saxon 192, 201
- Hebditch, M 102, 144
- Henry I 207, 216
- Henry II, Henry son of 220
- Henry III 243, 247
- Henry VIII 263, 275
- Hercules 148
- Heybridge, Roman settlement 103
- High Street
 - archaeological deposits 11, 13, 14, 16, 18
 - archaeological/historical evidence
 - late Iron Age 45
 - early Roman 89, 91, 92, 96
 - later Roman: buildings 114, 115, 172, 174; burials 159, 160; dark earth 142; temple 143
 - early Anglo-Saxon 181, 184, 185, 187, 188
 - late Anglo-Saxon 191, 193, 195, 196–7, 199, 204
 - early medieval: building materials 238; castle 216, 218; cellars 233; coin hoards 245, 250; cultivation plot 237; market place 239; non-masonry houses 234–5; pits 235, 236; preservation 251–2; stone houses 230, 231, 231, 232; street 221
 - late medieval: buildings 257, 259–61, 261, 262, 270, 271, 277; inns 267, 267; latrines 264; market place 259, 262; pottery 266
 - post-medieval: buildings 284, 286, 290, 295; drain 287; manufacturing 282, 291, 292
 - post-1700 298
 - excavations 7
 - see also* Castle Inn; Cups Hotel; George Hotel; market place; Minories; moot hall; Red Lion Hotel
- High Woods, survey 294
- hoards

- coin
 - Iron Age 46
 - Roman 96, 133, 172, 187
 - medieval 211, 213, 245, 250
- metalwork
 - Bronze Age 21, 22
 - Iron Age 25
- hobnails, Roman 155, 156
- Hole in the Wall, evaluation 142
- hollow-ways 196, 222, 257
- Hollytrees Meadow
 - archaeological deposits 18
 - archaeological evidence 102, 104, 119, 147
 - excavations 4, 5
- Holy Trinity Church, archaeological/historic evidence
 - Anglo-Saxon 195, 196, 197–8, 197, 198, 203, 205
 - medieval 229–30, 249, 274
- Homefield Road, enclosure 53–4
- hones
 - Anglo-Saxon 178, 192
 - medieval 241–2
- Hopkins, Matthew 280–1
- Horkesley Heath, dyke 42
- horn-working, Roman 139
- horticulture
 - Roman 141–2
 - post-medieval 294
- Howard family 347
- Hoxnian Interglacial 25
- Hugh Pottere 243
- Hull, M R (Rex), work by 5–6, 8
 - late Iron Age 36, 37, 38
 - Roman 60, 102
- Hull Mill 201, 246, 268
- Hyderabad Barracks, cremation 39, 52
- hypocausts
 - early Roman 89
 - later Roman
 - domestic buildings 127, 128, 131, 132
 - extramural 104, 166–7, 168
 - Gosbecks 146
 - public buildings 115, 116
- Hythe
 - archaeological/historical evidence
 - prehistoric 29
 - Roman 113
 - Anglo-Saxon 176, 200
 - early medieval 208, 240, 242, 246, 251, 252–3

- late medieval 255, 259, 263–4, 268, 278
- post-medieval 280, 287, 295–6
- post-1700 297, 299, 300
- excavations 7–8, 210

Hythe Hill

- archaeological/historical evidence
- early medieval 211, 240
- late medieval 264, 266, 270, 278, 344–5
- post-medieval 282, 283, 289, 291, 296
- church *see* St Leonard's Church

Hythe Mill 263, 291

Iceni 39, 78

- imbibing pipe, Roman 158, 159
- imperial cult 77–8, 98, 100, 142, 173
- ingots 40, 80, 91
- inns, late medieval 267
- insect remains 253

Inworth

- church 202
- pottery manufacturing 243

Iron Age, early–middle 23, 24, 27, 28, 29–30, 31

Iron Age, late

- archaeological evidence
- agriculture and field system 47–52, 50
- burials and ritual structures 49, 52–4
- dykes 42–3
- gazetteer of monuments and finds 305–6
- manufacturing and trade 46–7
- oppidum* 41–2
- preservation 56
- settlement 43–5, 51
- current state of knowledge 54–6
- finds evidence 38–41
- future research 57
- historical framework 33–6, 35
- importance 56–7
- past work 36–8, 37

ironworking

Roman

- colonia* 80, 86, 91, 92
- fortress 64, 70–2, 73

- later town 127, 137, 138

- Anglo-Saxon 176

- medieval 244

- post-medieval 291

Isis 148

Jacklin's Cafe *see* Cups Hotel

- Jarmin, A M 3, 294
- Jarmin collection 4, 94
- Jenkins, Revd Henry 4, 36, 79, 101, 103
- Jewish population 208, 230, 231, 245, 250, 252
- Jobson, Francis 285
- John (King) 208, 219
- John Dyer 244
- Jones, J T 79
- Joslin, George 3
- Joslin collection 4, 94, 159
- Jupiter 146, 148

- Kelvedon, burial 54
- Kent Blaxill site 218
- Kidman's Dyke 42, 43, 48
- Kiln Road, archaeological evidence 28, 34, 36, 45, 46
- kilns
 - early Roman 74, 92, 97
 - later Roman 102, 134–5, 136, 171, 172
 - early medieval 210, 237, 238, 243, 245, 251
 - late medieval 257–8, 259, 266, 277, 278
 - post-medieval 282, 291
- King Coel's well 205, 264
- Kingswood Forest 248, 249, 275, 294
- Kirkee McMunn Barracks, archaeological evidence
 - Bronze Age 28
 - late Iron Age 45, 48
 - Roman 104, 150, 167, 168, 170
- knives, Anglo-Saxon 181, 183

- lamp making, Roman 90, 136, 173
- lamps
 - Roman 80, 87, 134, 139, 154
 - Anglo-Saxon 184
- Land and House Property Development Corporation 7
- Land Lane
 - archaeological evidence 108–9
 - mill 247
- Langenhoe
 - deserted medieval village 249
 - kiln 266
 - salt-working 248
 - settlement 202
- Last's Garage, river deposits 113
- Laver, Dr Henry 5, 36
- Laver, Henry (Ted) 5, 36
- Laver, Philip 5, 22, 36, 79, 102, 103, 191, 257
- Laver Ditch 169
- Laver

- mills 291
- settlement 202
- Layer Breton, deserted medieval village 249
- Layer de la Haye, archaeological evidence 26, 46, 181
- Layer de la Haye Dyke 42
- lead-working
 - medieval 228, 269, 274
 - post-medieval 294
- leather hall 290
- leather-working
 - Roman 64, 74, 91
 - Anglo-Saxon 201
 - medieval 213, 244, 251, 255, 268
- Legio II Augusta 59, 60
- Legio XX 60, 72, 74
- Lewis's Gardens, structure 130
- Lexden, archaeological/historical evidence
 - prehistoric 25, 29
 - Roman 4
 - Anglo-Saxon 201, 202
 - early medieval 243, 247, 248–9, 249
 - late medieval 256, 263, 266, 276
- Lexden Cemetery, archaeological evidence
 - late Iron Age 33, 34, 36, 39, 54, 56
 - Roman 94, 150, 152
- Lexden Dyke, archaeological evidence
 - late Iron Age 36–7, 42, 43, 52, 54, 55
 - Roman 66, 111
- Lexden Grange, cemetery 52
- Lexden Hill, Civil War finds 294
- Lexden Lodge, kiln 135
- Lexden Mill 246, 268, 291
- Lexden Mount 5, 202
- Lexden Road, archaeological evidence
 - late Iron Age 45
 - early Roman 96
 - later Roman 101, 103, 104, 111, 135, 137
 - Anglo-Saxon 183, 200
 - Civil War 293
- Lexden Tumulus
 - archaeological evidence 34, 35, 39, 46, 53, 56, 57
 - excavation and review of 5, 36, 38
- Lexden Wood Golf Club, archaeological evidence 49–52, 103
- lime kilns
 - Roman 136
 - medieval 238, 245–6, 269, 277
 - post-1700 300
- Lion Walk, archaeological evidence

- early Roman
 - colonia* 79, 80, 83, 85, 92
 - fortress 62; buildings 69, 70, 71; defences 68, 69; manufacturing 64; site preparation 67
- later Roman 102
 - dark earth 142
 - decline 133, 134
 - defences 107, 108
 - domestic and commercial buildings 122, 124, 125–6, 127, 128, 131, 132, 133
 - manufacturing and trade 137, 138, 139, 140
 - public buildings 114
 - street 106
 - water supply 119
- early Anglo-Saxon 177, 178, 180, 181, 183, 184
- late Anglo-Saxon 191, 193, 195, 196, 199, 201, 204
- early medieval
 - defences 239
 - manufacturing and trade 239, 244, 245, 246
 - open space 237
 - pits 235, 236
 - stone building 210, 233, 234, 235, 250
 - street 221
- late medieval 257, 265, 266, 267, 268, 269
- post-medieval
 - buildings 282, 286, 289, 290
 - defences 287
 - manufacturing and trade 282, 291, 293, 294
- Lion Walk United Reformed Church, archaeological evidence 62, 68, 82, 131
- Little Birch, church 202
- Little Stanway, church 202
- Lodders Lane (Abbeygate Street) 238
- London
 - bishop of 195, 198, 228, 247
 - road to 3, 67, 93, 111, 203
- Long Wyre Street, archaeological evidence
 - early Roman
 - colonia* 82, 87, 89, 90, 93
 - fortress 62, 68
 - later Roman 102
 - animal bone 140
 - buildings 124, 127, 130, 131, 132
 - manufacturing and trade 138, 139, 140
 - water supply 119
 - Anglo-Saxon 181, 193, 195, 200
 - early medieval 211, 221, 235, 236, 237, 239
 - late medieval 257, 264, 266
 - post-medieval 282, 287
 - see also* Bonners
- Longinus Sdapeze, tombstone 72–3, 74, 93, 94

- loomweights
 - Bronze Age–Iron Age 25, 29, 41
 - Roman 90
 - Anglo-Saxon 178, 183
- louvers 235, 242, 243
- Lucas family 281, 287
 - John 285
 - Sir John 281
- Lucas House 285
- Lufkin, Revd Thomas 36, 60

- McMaster, Ida 7, 38, 103
- Magdalen Street, archaeological/historical evidence
 - Anglo-Saxon 196
 - medieval 238, 257, 259, 266
 - post-medieval 281, 282, 284
- Maidenburgh Street, archaeological/historical evidence
 - Roman 89, 102, 115–16, 117, 160
 - Anglo-Saxon 182–3, 193, 195
 - early medieval 218, 219, 220, 230, 237
 - late medieval 261, 269
- Maldon, mint 190, 191, 201, 204
- Maldon Road, archaeological/historical evidence
 - Roman 112, 149, 155, 167
 - medieval 238, 261, 263
 - post-medieval 291
- malting 139, 300
- Manor Road, excavation evidence 87, 112
- Manpower Services Commission schemes 7
- mansio* 128
- manufacturing
 - late Iron Age 45–7, 56
 - early Roman 64, 90–1
 - later Roman 100, 134
 - baking and brewing 139
 - bone and horn 138–9
 - glass 136
 - metal 137–8
 - mosaics and stucco 138
 - pottery 134–6
 - tiles and lime 136
 - Anglo-Saxon 200–1
 - medieval 242–6, 255, 266–9
 - post-medieval 291–3
 - post-1700 297, 298, 299, 300
- marble veneers, Roman 124, 128, 132, 147, 162, 166
- Marcian, Joan and Richard 230
- Margaret Road, archaeological evidence 45, 135, 294

- market cross 282, 286
- market place
 - Anglo-Saxon 195, 196–7
 - medieval 239–40, 262
 - post-medieval 286, 290, 298
- Market Tavern, Roman building 166
- Marks Tey
 - palaeo-environmental data 25
 - Stane Street 67, 111
- Marquis Of Granby (Ye Olde Marquise) 270, 270, 292, 347–8
- Mars 146, 148
- Mars Medocius 148
- martyrium* 161, 162, 198, 199
- Mason, Ernest 5, 79
- Matres Suleviae 148
- Maudlin Chapel 228, 274
- mausolea, Roman 157, 198
- Maynard, Nicholas 293
- Meance Barracks, cremation 182
- medical instruments, Roman 96, 147
- medieval period, early (1066–1348)
 - archaeological evidence 212
 - biological 253
 - castle 213–20, 213
 - defences 220–1, 220
 - domestic architecture 230–6, 231, 232
 - ecclesiastical buildings 222–30, 222, 224, 225
 - gazetteer of monuments and finds 340–3
 - manufacturing and trade 239–47
 - open space 236–7
 - public buildings and works 230
 - streets 221–2, 366
 - suburbs 237–8
 - current state of knowledge 249–51
 - evidence, nature of 210–11
 - finds evidence 211–13
 - future research 252–3
 - hinterland 247–9
 - historical framework 207–9
 - importance 252
 - past work 209–10
 - preservation 251–2
 - Roman materials, reuse of 238–9
- medieval period, late (1349–1540)
 - archaeological evidence
 - domestic, commercial and ecclesiastical architecture 267, 269–75, 270, 272, 367
 - gazetteer of monuments and finds 344–50
 - manufacturing and trade 266–9

- public buildings and works 263–6, 265
- urban plan 259–63, 260, 261
- current state of knowledge 276–7
- evidence, nature of 258
- finds evidence 258–9
- future research 278
- hinterland 275–6
- historical framework 255–7
- importance 277–8
- past work 257–8
- preservation 277
- Menny, John 235
- mercenaries, Saxon 175, 184
- Mercia, kingdom of 177
- Mercury 146, 147, 148
- Mercury Andescociuoucus 148
- Mercury Theatre, archaeological evidence 6, 62, 102
- Mersea Island 21, 154, 176, 204
- Mersea Road
 - burials 13, 181–2, 183
 - Mount 286
- Mesolithic period 25
- metalworking
 - Iron Age 46, 56
 - early Roman
 - colonia* 87, 88, 90, 91
 - fortress 64, 70–2, 74
 - later Roman 103, 137–8
 - Anglo-Saxon 192, 201
 - medieval 244–5, 269
 - post-medieval 291, 294
 - post-1700 300
 - see also* slag
- Metcalf, D M and Lean, W 192
- Middle Mill 205, 221, 246, 247, 268, 291–2
- Middle Row 262, 286
- Middleborough, archaeological evidence
 - Roman
 - altar 148
 - kiln 134
 - mosaic 138
 - occupation 102, 166, 172
 - road 106, 112
 - wells 14, 120
 - wharf 113
 - early medieval 210
 - buildings 222, 234, 237
 - environmental evidence 213, 244

- kilns 243
- late medieval 257, 258, 261, 268
- post-medieval 282, 289–90, 291, 293, 295
- Middleborough House, waterlogged finds 13
- Middlewick
 - axe 25
 - grange 248
- Mile End, archaeological/historical evidence
 - early medieval 210, 243, 247, 248, 249, 251
 - late medieval 266, 276
- Military Road, cremation 52
- Mill Place, kiln 135
- mills
 - Anglo-Saxon 201, 205
 - medieval 246–7, 249, 253, 268
 - post-medieval 291–2
 - see also* fulling mills; silk mills
- Minerva 148
- Ministry of Works 6
- Minories 290
- mints
 - late Iron Age 34, 36, 40, 45, 56
 - Anglo-Saxon 191, 192, 200–1, 204
 - medieval 207, 245
- mirrors
 - Iron Age 39, 52
 - Roman 80, 154
- Mistley, road to 67, 203
- Mithraeum 119, 120, 170, 171
- Moat Farm, kilns 136
- Moat Farm Dyke 42
- Moler Works Site, evaluation 29
- moneyers 191, 192, 200–1, 210
- Monksdown, mill 247, 268
- Monkwick 248, 276
- monumental arches
 - Balkerne Gate
 - early Roman 79, 89–90, 97
 - later Roman 107, 108, 114
 - temple precinct 143
- monumental brasses 274
- moot hall
 - archaeological/historical evidence
 - Anglo-Saxon 185
 - medieval 208, 209, 230, 263
 - post-medieval 286
 - destruction 3
- Morant, Revd Philip, observations by 1

- castle 218
- church 274
- defences 110
- dykes 36, 202
- King's Wood
- moot hall 209
- Morant Club 5, 143
- More Street 238
- mortars, Roman 139
- mosaics
 - discussion 171, 173
 - domestic buildings
 - 2nd century 127, 128
 - 3rd century 131
 - 4th century 132
 - extramural 163, 165, 166, 167, 168
 - local manufacture 138
 - public buildings 115
 - see also* tessellated pavements; *tesserae*
- Mount Bures 54, 136
- municipal records, medieval 211
- museum 1–3, 4, 4
- Museum Street, archaeological evidence 144, 219–20, 266
- Myers, J N L 5

- Napier Road, burials 151
- Nayland, road to 67, 203
- Neolithic period 25–6, 25
- Nero 143
- New Priory Mill 246
- nonconformism 279, 280
- Norden, John 209
- Norfolk's House 218
- North Bridge 13, 18, 113, 230, 264
- North Cemetery 157
- North East Essex Aqua club 209
- North Gate
 - archaeological deposits 16
 - archaeological/historical evidence
 - Roman 110, 112
 - Anglo-Saxon 193
 - medieval 221, 265, 277
- North Hill
 - archaeological/historical evidence
 - Bronze Age 27
 - Iron Age 45
 - early Roman 60, 62, 67, 68, 74, 76, 90
 - later Roman 106, 119, 127, 128, 138

- early Anglo-Saxon 177, 180, 193, 199
- late Anglo-Saxon 191, 193, 204
- early medieval 235, 236, 244, 245
- late medieval 257, 270, 271, 346–7, 348
- post-medieval 281, 284, 289, 291, 292
- excavations 4, 6
- see also* Gilbert School; Marquis of Granby
- North Mill 201, 205, 246, 247, 268, 291
- North Shoebury, cemetery 175
- North Station Road
 - archaeological deposits 18
 - archaeological evidence 112, 116, 136, 166
- North Street 264, 286
- north-east gate *see* Duncan's Gate
- Northern Approach Road, archaeological evidence 45, 48, 168
- Northgate Street, archaeological evidence 110, 290
- Norwich (Norfolk), road to 112, 203
- Numina Augustorum 148
- Nunn's Road, archaeological evidence
 - early Roman 60, 68, 85, 89, 91, 96
 - later Roman 125–7
 - Anglo-Saxon 177, 180
- Oaks Drive, kilns 135
- Oath Book* 211, 258
- Old Heath, archaeological/historical evidence
 - Anglo-Saxon 176, 178, 184, 200
 - medieval 240, 241, 247, 263, 268
- Old Heath Road, barrows 29
- Old Poultry Site 282, 290
- Oliver's Dyke 42, 43, 55
- oppidum see* Camulodunum
- opus signinum*
 - early Roman 89, 90
 - later Roman
 - defences 109
 - domestic/commercial buildings 115, 128, 130, 131, 132
 - extramural 166
 - public buildings 115
 - riverside 113
 - temple 144
- Osborne Street
 - archaeological deposits 14, 18
 - archaeological evidence
 - Roman 102, 167
 - early medieval 210, 211, 213, 222, 238, 244
 - late medieval 257, 268
 - post-medieval 282, 283, 290, 294

Ostorius Scapula 60, 77
Oxford Road, figurine 148

Pakenham, M J 79

Palaeolithic period 25

palette manufacture, Roman 136

Palisaded Earthwork 169

palstaves, Bronze Age 21, 22, 26

Papillon Road, cistern 287

pargeting 289, 348

Parish, Josiah 4

parochial system

Anglo-Saxon 190, 196, 197, 198, 203

medieval 247, 263

Parson's Heath 247

Paxman, James 297

Peartree Road, dyke 169

Peasants' Revolt 256, 264

Pedlars Cross 263

Peldon 201, 202

Pelham's Lane 221, 230, 232–3

pesthouses 286

Pilgrim Trust 6, 7

pillory 263

pilum 96

pinbeaters, Anglo-Saxon 193

pins

Iron Age 52

Anglo-Saxon 183

Pitchbury Ramparts hillfort 25, 30

pits

Neolithic 22, 25–6, 25, 31

Iron Age 44

medieval 235–6, 239, 253, 264

post-medieval 281, 282, 291

plague 280, 286, 295

plant remains

late Iron Age 39, 47–8

early Roman 63, 72, 80, 90, 91, 92–3

later Roman 140

medieval 248, 253, 268

plaques, Roman 136, 137, 146, 147, 148

Pliny the Elder 78

pollen analysis 39, 47

Pollexfen, Revd J H 3

Poor House 286

port *see* Hythe

Portreeve's House 258, 287

Post Office site *see* Head Street

post-medieval period (1540–1700)

agriculture 294

archaeological evidence

buildings 283, 289–90, 368

Civil War 292, 293–4

defences and castle 287

Dissolution, impact of 285–6

Hythe 287

public buildings and other works 286–7

urban plan 283–5, 284

current state of knowledge 295

domestic and commercial architecture 288–9

evidence, nature of 282

finds summary 283

future research 295–6

gazetteer of monuments and finds 351–7

historical framework 279–81

importance 295

manufacturing and trade 290–3

past work 281–2

preservation 295

post-medieval period (post-1700)

historical framework 297–300, 298–9

importance and potential 300–1

pottery

Neolithic 22, 25, 25, 26

Bronze Age 22, 27, 28, 29, 30

early-middle Iron Age 21, 22, 25, 29, 30

late Iron Age 39, 40, 41, 44, 46, 52, 53

early Roman

colonia 80, 81, 90–1

fortress 63

later Roman 133, 139, 158, 172, 173

early Anglo-Saxon 183–4

late Anglo-Saxon 199–200

early medieval 210, 211, 241, 242–3

late medieval 257–8, 266, 274, 276–7

post-medieval 281, 282, 283

pottery manufacture

Iron Age 46–7, 56

early Roman 63, 74, 80, 91

later Roman 102, 103, 134–6, 172, 173

Anglo-Saxon 201

early medieval 210, 237, 242–3, 251

late medieval 257–8, 259, 262, 266, 277, 278

post-medieval 291

Pottery Shops, Roman 79, 80, 90–1, 96

- prehistoric period 19–22
 - archaeological evidence 23, 24, 25–30, 25, 26, 27, 28
 - current state of knowledge 30
 - finds evidence 22–5
 - future research 31
 - gazetteer of monuments and finds 303– 4
 - importance 30–1
 - past work 22
 - preservation 30

Prettygate Dyke 42, 43, 60, 64–5, 75, 112

Prettygate Junction 37, 42

principia

- fortress 66, 74, 75

- later Roman period 82, 89, 98, 173

Priory Field, fishponds 226

Priory Street, archaeological/historical evidence

- Roman 167

- Anglo-Saxon 193, 196

- medieval 221, 238, 263, 265

processions, Roman 100

property divisions

- Roman 106, 124

- Anglo-Saxon 185, 187, 188, 195

- medieval 239, 250, 262, 269

Ptolemy 78

quays *see* wharves/quays

Queen Street

- archaeological evidence

- Roman 110, 115, 132, 133, 136

- Anglo-Saxon 181, 193

- medieval 221, 222, 344

- post-medieval 289

- excavations 6

- museum 1

Queens Road, archaeological evidence 135, 148

querns

- Roman 80, 139

- Anglo-Saxon 200

- see also* rubbing stone

- railway 1, 3, 297
- Ralph, earl of Norfolk 214
- The Rampers 202
- Rebow House 289
- Red Lion Hotel 258, 267, 267, 271, 291, 347
- Red Paper Book* 211, 258
- Red Row 286
- Richard I 240, 247
- Richard II 256
- Richardson, Miss 108
- ridge and furrow 249, 276, 294
- ring-ditches 20, 22, 28–9, 31
- rings, Anglo-Saxon 182, 183
- Rivenhall villa 104, 168–9
- roads
 - Roman
 - early 66–7, 73, 75
 - later 103, 111–13
 - location 24
 - surveys 5, 60, 103
 - Anglo-Saxon 203–4
 - see also* streets
- robber trenches, medieval 238–9, 249–50
- Robert le Verrer 245
- Rodwell, Warwick and Kirsty 192, 210, 281–2
- Roger, earl of Hereford 214
- Roman Essex Society 37, 56
- Roman period
 - early 59–60; *see also* *colonia*; fortress
 - gazetteer of monuments and finds 307–37
 - later *see* Roman town (AD 61–410)
- Roman town (AD 61–410)
 - archaeological evidence
 - agriculture and diet 140–2
 - boundaries, defences and roads 106–13, 107, 108, 109, 111
 - buildings: domestic and commercial (*illus*) 120–33; extramural 163–5, 164, 166–7; public and monumental 113–19, 117, 118
 - decline and collapse 133–4
 - extramural development 162–9, 164
 - manufacturing and trade 134; baking and brewing 139; bone and horn 138–9; glass 136–7, 137; imports 139; metalworking 137–8; mosaics and stucco 138; pottery 134–6; shops 139–40; tile and lime kilns 136
 - religion and burial practice (*illus*) 142–62
 - topographical organisation 103–6, 105
 - water supply 117, 119–20
 - current state of knowledge 170–2
 - future research 173–4

- historical framework 99–101
- importance 173
- past work 101–3
- preservation 172–3
- Romanisation 173
- roof tiles, medieval 213
- Rose and Crown Hotel 250, 258, 259, 271, 344
- Round, Charles 4
- Round, J H 209
- Round, Revd J T 4, 101
- roundhouses
 - Bronze Age 22
 - Iron Age 27, 28, 29, 30, 57
 - Roman 103
- Rowhedge 249, 280
- royal charter 208
- Royal Commission 5, 38, 258, 282
- Royal Grammar School
 - archaeological evidence
 - Iron Age 52
 - early Roman 60, 65, 66, 88–9, 93
 - later Roman: cemetery 149, 149, 152–4, 155, 159; metalworking 138; road 111, 112; temple 147
 - excavations 6, 102
- Royal London Insurance building 7
- Royal London Mutual Insurance Society 7
- royal vill/manor 176, 190, 195, 197, 214, 236
- rubbing stone, Neolithic 25, 26, 31
- Rudsdale, E J 5, 6, 102
- Ryegate 221, 265, 278
- Ryegate Road
 - course of 219
 - sewer 144
- Saffron Walden, listed buildings 366
- Sainsbury's site 6, 85, 114–15
- St Albans (Herts), road to 203
- St Andrew's Chapel 228
- St Anne's Chapel 228, 251, 275
- St Anne's Guild 275
- St Anne's Holy Well 228, 264, 275
- St Botolph's Church, archaeological/historical evidence
 - Anglo-Saxon 199, 204, 205, 224
 - post-Dissolution 272, 285, 294
- St Botolph's Priory
 - archaeological/historical evidence
 - Roman 160, 167
 - early medieval 211, 224–6, 224, 225, 238, 250, 252
 - late medieval 257, 272–3, 285, 286

- estates 247, 248, 276
 - excavations 210
- St Botolph's Quarter 8
- St Botolph's roundabout 18, 272
- St Botolph's Street, archaeological evidence
 - Roman 113
 - medieval 222, 226, 238, 265, 273
- St Catherine's Hospital 228, 273, 274
- St Clare Drive, burial 94, 159
- St Clare Road, burials 29, 36, 52, 56
- St Giles's Church
 - cemetery 211, 223, 229
 - churchyard wall 224, 272
 - description 228–9
 - floor tiles 266
 - lime kiln 246
 - Lucas vault 281
- St Helena School, archaeological evidence 88, 112, 146, 168
- St Helen's Chapel 116, 197, 228, 251, 275
- St Helen's guild 285
- St Helen's Well 264
- St James's Church 196, 229, 230, 274
- St John's Abbey
 - archaeological/historical evidence
 - Bronze Age 28
 - Roman 148, 149, 155, 159
 - early medieval 207, 208, 211, 223–4, 250–1, 252
 - late medieval 256, 257, 271–2, 272
 - post-medieval 283, 285, 294, 295, 296
 - estates 247, 248, 276
 - excavations 210
- St John's Church 191–2, 198–9, 204–5, 210, 223, 239
- St John's Green 113, 228, 238, 275
- St John's Street
 - archaeological/historical evidence
 - Roman 113, 148, 160, 167
 - medieval 238, 262, 265
 - post-medieval 284, 294
 - stream 11
- St Joseph, J K 38
- St Leonard's Church 229, 240, 274, 285, 294
- St Martin's Church, archaeological/historical evidence
 - Roman 160
 - Anglo-Saxon 198, 205
 - medieval 229, 249, 271, 274
 - post-medieval 294
- St Martin's Lane, pavement 1
- St Mary at the Walls Church 195, 198, 205, 249, 285, 294

- St Mary Magdalen Church 227–8, 273, 274–5
- St Mary Magdalen Hospital, archaeological/historical evidence
 - early medieval 207, 210, 211, 213, 227–8, 251
 - late medieval 257, 273–4
 - post-medieval 286
- St Mary's Chapel 228, 251, 275
- St Mary's Cottage 62, 180, 246, 269
- St Mary's Hospital *see* Balcerne Heights
- St Mary's Rectory, archaeological evidence
 - early Roman 62, 68, 79, 83, 85
 - later Roman 102, 106, 108, 131, 135
- St Mary's Steps 221, 257
- St Michael's Church 249
- St Nicholas's Church
 - archaeological/historical evidence
 - Roman 89, 102, 114
 - Anglo-Saxon 191, 196, 199, 204, 205
 - medieval 210, 229, 249
 - excavation 6
- St Peter's Church, archaeological/historical evidence
 - Anglo-Saxon 196, 201, 205
 - medieval 229, 249, 274
 - post-medieval 285
- St Peter's House, waterlogged finds 13, 14, 282
- St Peter's Street, archaeological/historical evidence
 - Roman 113, 117, 119
 - post-medieval 287, 300
- St Runwald's Church, archaeological/historical evidence
 - Anglo-Saxon 181, 185, 188, 195, 196–7, 204–5
 - medieval 229
 - post-medieval 298
- St Thomas's Chapel 228, 251, 275
- Salary Brook 42, 291
- salt production/trade
 - Iron Age 40–1, 47
 - Roman 64, 101
 - Anglo-Saxon 203
 - medieval 248
- Saracen's Head 267
- Scheregate 220, 221, 238, 265, 278, 289
- sea levels 19, 101
- seal 271; *see also* cloth seals
- Sealey, Paul 38
- seaxes, Anglo-Saxon 183
- Sebares Mill 246, 268
- Seneca 102
- Serpentine Walk, pottery 135
- Severalls Hospital 8, 168, 301

sewers

Roman 144

post-medieval 1

shackles, Roman 119–20

Shakespeare Road, burial 29

shambles 239, 284, 286

Shaws 276

Sheepen

archaeological evidence

Bronze Age 22, 26, 27, 29, 30–1

late Iron Age 33, 51; finds evidence 39–41; future research 57; manufacturing and trade 45–6, 47; past work 36, 38; preservation 56; settlement 43–5, 55

early Roman: Boudican revolt 96, 97; cremations 94; finds evidence 63, 64, 80, 81; manufacturing and trade 73–4, 79, 91, 92; structures 87–8

later Roman: burials 149, 155, 158; ditch 106; manufacturing and trade 136, 137, 138, 171; occupation 168, 201; past work 102; temples 146–7, 171; wells 120

Civil War 281, 293, 295, 296

finds preservation 14

Sheepen Dyke, archaeological evidence

late Iron Age 42, 43, 54, 55, 56, 60

Roman 73–4, 112

Civil War 293

shellfish

Roman 140–1

medieval 241, 253

post-medieval 290

shields

Roman 96

Anglo-Saxon 181, 183

ship, Iron Age, reconstruction 47

shipbuilding 263

shoemaking, medieval 240, 244, 251, 255, 268

shops

Roman 79, 80, 90–1, 96, 139–40, 174

medieval 239–40, 270, 344, 345, 346

post-medieval 290

Short Wyre Street, drain 110, 111

shrines

late Iron Age 53

Roman 147, 148

Shrub End, fort 7, 65

Shrub End Dyke 42, 43, 60, 64, 65

sieges

14th century 208, 256

1648 285, 287, 292, 293–4, 295, 296

silk mills 300

Silures 60, 77

Silvanus 55, 147, 148

- Silvanus Callirius 147, 148
- silver-working
 - Roman 64, 138
 - Anglo-Saxon 201
- Simkins, Messrs 291
- Simons Lane 259
- Sir Isaac's Walk 284, 290
- Siric 198, 223
- Sixth Form College
 - archaeological deposits 14, 16
 - archaeological evidence
 - early Roman 62
 - later Roman 108, 128, 129, 130
 - excavations 7, 8, 102
 - see also* Gilbert School
- Skinner, Revd John 36
- slag
 - Iron Age 46
 - Roman 90, 127, 131, 137, 138, 171
 - Anglo-Saxon 201
 - medieval 244
- slavery 119–20
- Smith, Charles Roach 4
- Smith, Payler 36, 60
- South Gate 193, 221, 287
- South Street 222
- south-east gate 110, 113
- Sowen Wood 248
- Spanish Armada 280
- spearheads, Anglo-Saxon 181, 182, 183
- Speed, John, map by 282, 283–4, 284
- Sphinx 1, 3, 152
- spindlewhorls
 - Bronze Age 29
 - Iron Age 41
 - Anglo-Saxon 178, 180, 183, 192, 193, 200
 - medieval 244, 259, 268, 277
- Spring Lane, Roman building 168
- springs 11, 14, 43, 72, 119
- Stane Street 66, 67, 111, 203
- Stane well *see* Stanwell
- Stanway, archaeological/historical evidence
 - prehistoric 22, 25, 26, 28, 29, 30
 - late Iron Age
 - aerial survey 37, 38
 - droveway 48–9
 - funerary enclosures 41, 49, 49, 53, 54, 55–6, 57
 - settlement 41

- Roman 79, 95–6, 103
- Anglo-Saxon 201, 202, 203
- Stanway Green, mosaic 168
- Stanwell (Stane well) 205, 230, 264, 284
- Stanwell Street, archaeological/historical evidence
 - Iron Age 45
 - medieval 224, 238
 - post-medieval 284, 285, 300
- Stephenson, David 210
- Stockwell 230, 264, 291
- Stockwell Street, archaeological/historical evidence
 - Anglo-Saxon 193–5
 - medieval 257, 266, 346
- Stokes Mill 201, 246, 247, 268, 291
- stove tiles 291
- Strabo 34
- strap ends, Anglo-Saxon 183, 192, 200
- street furniture 300
- streets
 - early Roman
 - colonia* 82, 84, 97
 - fortress 61, 69, 74, 365
 - later Roman 104, 105, 106, 170
 - early Anglo-Saxon 185, 187, 188
 - late Anglo-Saxon 191, 193–6, 194, 204, 205
 - medieval 221–2, 259–61, 260, 366
- stucco work, Roman 138, 144
- Stukeley, William 36, 79, 225, 226
- suburbs, early medieval 237–8
- Suetonius 34, 60, 78
- sunken-featured buildings
 - Anglo-Saxon 178–80, 180, 184–5, 187
 - early medieval 233–4, 237
- Swetinc 200
- swords, Anglo-Saxon 183
- synagogue 208, 230
- Tacitus, on
 - Boudican revolt 36, 77, 88, 97
 - colonia* 60, 77, 81, 82
 - temple 79, 102, 143
 - theatre 89, 116
 - Trinovantes 36
- tanning
 - Roman 64
 - medieval 244, 255, 268–9
- Tasciovanus 34, 35, 36
- Taylor, John 3, 4, 149

- Taylor collection 94
- Telephone Exchange site
 - archaeological deposits 16
 - archaeological evidence
 - early Roman: *colonia* 85, 90, 96, 97; fortress 62, 69, 70
 - later Roman 124, 128
 - excavations 6
- Temple of Claudius
 - archaeological deposits 18
 - archaeological evidence 85, 88–9, 99, 142–5, 142
 - building materials 83
 - conversion to Christianity 160–1
 - dating 97
 - excavations 7, 79, 102
 - future research 98
 - historical background 78
 - location 70, 100
- temples
 - archaeological evidence
 - early Roman 55, 88–9
 - later Roman: Christianity 160–1; Gosbecks 144, 145–6, 171; other 146–7, 149, 152–4, 171
 - excavations 4, 102
 - see also* cult objects; mithraeum; shrines;
- Temple of Claudius
- tenter yards 244, 292, 293
- territorium, colonia* 81–2, 167
- tessellated pavements 114, 138
 - 2nd century 127, 128
 - 3rd century 131, 132
 - extramural 165, 166, 167
 - temples 145, 147
 - see also* mosaics; *tesserae*
- tesserae* 137, 138, 145, 146, 166, 171
- textile production
 - late Iron Age 41
 - Roman 90
 - Anglo-Saxon 178, 192–3, 201
 - early medieval 242, 243–4, 251
 - late medieval 255, 256, 259, 268, 277, 278
 - post-medieval 279, 280, 284, 292–3, 295, 296
 - post-1700 297, 298, 300
- theatres, Roman
 - colonia* 89, 97, 98
 - Gosbecks 6, 104, 116, 144, 145, 171
 - later Roman town 102, 115–16, 117, 173
- thimbles 268, 293
- tile production

- Roman 64, 80, 92, 136
- medieval 245, 259, 262, 266–7
- post-medieval 291
- tiles
 - early Roman
 - fortress 63, 70, 70
 - colonia* 78, 80, 83, 85, 89, 92
 - later Roman 115, 116, 121, 131, 136
 - Roman reused 238
 - post-medieval 290
 - see also* floor tiles; roof tiles; stove tiles
- Tiptree, pottery production 291
- tithes 190
- Togodumnus 36, 58
- tokens
 - late medieval 277
 - post-medieval 290
- tombstones, Roman
 - description 72–3, 93–4, 93, 94, 154
 - discovery and location 60, 93, 152
- towers, town wall 109, 110, 174
- town cage 263
- Town Hall 297–8, 298
- town plan 2
- trackways, late Iron Age 44, 45, 48, 55
- trade
 - late Iron Age 33–4, 39, 40, 45–6
 - early Roman 79–80, 90–1, 92
 - later Roman 100, 134, 136–7, 139
 - Anglo-Saxon 200
 - early medieval 208, 213, 239–40, 241–2, 252
 - late medieval 255, 256–7, 266, 276–7, 278
 - post-medieval 280, 290–1
- tribal groupings, Iron Age 33, 34–6, 57
- Trinity Lane, well 264
- Trinity Street, archaeological evidence
 - Anglo-Saxon 193, 195, 200
 - early medieval 235, 236
 - late medieval 257, 266, 344, 347
- Trinovantes 34–6, 38, 55, 78, 100
- Triple Dyke 60, 64, 103
- Tubswick 248
- tufa 125
- Turner Rise, archaeological evidence
 - Roman
 - building 168
 - cemetery 103, 149, 157, 158, 172
 - road 112

post-medieval 282, 294

Tyler, Watt 256

Union Cemetery 152

Union Workhouse *see* Balcerne Heights

Venus 148

Verica 59

Vespasian 59, 60

vessels, copper alloy, Roman 52, 95, 139; *see also* cauldron

vicus, early Roman 63, 73

Viking raids 177, 191, 207, 214

villa regalis see royal vill/manor

villas, Roman 102, 104, 106, 167–8, 168–9, 170

Vineyard Gate, archaeological deposits 16

Vineyard Press site, archaeological evidence

Roman 89, 102, 114

post-medieval 287

Vineyard Street (Berisland), archaeological evidence

Roman 103

Anglo-Saxon 192, 193, 196

medieval 221, 238, 244, 262

Vint collection 4

votive deposits

Neolithic 25–6, 25, 31

Iron Age 30, 52

Roman 128, 130, 154

Vulcan 148

walkways, Roman 106, 109, 113

wall paintings

early Roman

colonia 78, 80, 83, 85, 89

fortress 63

later Roman

1st century 124

2nd century 127, 128

3rd century 131, 132

extramural buildings 163, 165, 166, 167

mortuary monument 162

North Station Road 116

medieval 197

c 1600 347

wall veneers *see* marble veneers

Walter Baker, widow of 246

warehouse, post-medieval 287, 290

warren 247

Warren Field, archaeological evidence 102, 134–5, 168, 172

‘Warrior Grave’ 95

- Water Lane, urns 29
- water supply
 - early Roman
 - colonia* 83, 86, 90
 - fortress 72, 75
 - later Roman 119, 120, 146, 171
 - early medieval 230, 236
 - late medieval 264
 - post-medieval 284, 286–7
 - post-1700 297
- water tower 297
- waterlogged deposits
 - Roman 75–6, 173
 - early medieval 213, 252–3
 - late medieval 257, 277
 - post-medieval 295
- Webbe (Webb), Henry 286, 292
- wells
 - Roman 14, 120, 166
 - Anglo-Saxon 199, 205
 - medieval 215, 230, 236, 238, 264
- Welshwood 248
- Wessex, kingdom of 177
- Wessex Culture 26
- West Bergholt
 - church 202
 - deserted medieval village 249
 - manor 276
- West Cemetery 150–2
- West Donyland
 - Canonswick 248
 - ducking stool 263
 - estates 201, 247, 276
- West House Farm, enclosure 22, 29–30
- West Lodge
 - excavations 3
 - Roman finds 94, 149, 154
- West Lodge Road, burials 154–5
- West Mersea
 - church 202, 249
 - coins, Anglo-Saxon 181
 - estate, Anglo-Saxon 201
 - priory 202
- West Stockwell Street, archaeological/historical evidence
 - Roman 90
 - Anglo-Saxon 193–5, 196, 197
 - medieval 234, 235, 236, 262, 270, 345–6
 - post-medieval 284, 289

see also Bay House

wharves/quays

- Roman 113
- medieval 237, 240, 251, 252, 263, 278
- post-medieval 295

wheel ruts, Roman 112

Wheeler, Sir R E M 5, 6, 79, 102, 191, 209

Wheeley, John 213, 287

wicks 248

William I 207

William's Walk, burial 160

Wilson, David 7

windmills 247, 268

window glass

- early Roman 70, 78, 83
- later Roman 127, 128, 131, 137
- late medieval 274

wine trade

- Iron Age 33, 34, 39, 40, 46
- Roman 72, 80, 92, 139
- early medieval 241

Winnock's Almshouses 286

Winsley's Almshouses, Iron Age material 45, 52

Wire, William, observations by 1–3, 4

- early Roman 89
- later Roman

 - bridge 113
 - burials 156, 157, 162
 - defences 110
 - extramural deposits 165
 - kiln 136

- Anglo-Saxon 181
- medieval 226
- post-medieval 286

witchcraft trials 280–1

Wivenhoe

- kiln 266
- port 255, 280
- settlement 202

wood-working

- Roman 64
- Anglo-Saxon 201

woodland 203, 248–9, 275, 294

wool market 290

World Wars I & II 298–300

Wormingford, church 249

Wylde, Peter le 235

Wyre Street, archaeological evidence

Roman 89

medieval 237

post-medieval 281

see also Sainsbury's site

Wyre Street Arcade 6, 281

Ypres Road, enclosure 22, 27, 28, 29